**Order No. MD0503060C3**

## Portable Stereo CD System

# RX-ES29GC / RX-ES29GS / RX-ES29GT

**Colour**

**(S)..........Silver Type**

# SPECIFICATIONS

## Specification

### ■ RADIO

| | |
|---|---|
| Frequency range | |
| FM | 87.50-108.00 MHz (50 kHz steps) |
| AM | 522-1629 kHz (9 kHz steps)<br>520-1630 kHz (10 kHz steps) |

### ■ CD PLAYER

| | |
|---|---|
| Sampling frequency | 44.1 kHz |
| Decoding | 16 bit linear |
| Beam source | Semiconductor laser (wavelength 780 nm) |
| No. of channels | 2 channel, stereo |
| Wow and flutter | Below measurable limit |
| D/A converter | MASH (1 bit DAC) |

### ■ TAPE RECORDER

| | |
|---|---|
| Track system | Stereo |
| Monitor system | Variable sound monitor |
| Recording system | AC bias |
| Erasing system | Multi Pole magnet |
| Frequency range | |
| Normal position | 50-14000 Hz |

### ■ GENERAL

| | |
|---|---|
| Speakers | 8 cm 5.4 Ω x 2 |
| Jacks | |
| Output | Phones: 3.5 mm stereo (16-32 Ω) |
| Power requirement (For GC/GS) | |
| AC | 110-127 V / 220-240 V, 50/60 Hz |
| Power consumption | 33 W |
| Power requirement (For GT) | |
| AC | 110 V, 60 Hz |
| Power consumption | 32 W |
| Battery | 12 V [Eight R20/LR20 (D, UM-1) batteries] |
| | ● Do not use rechargeable type batteries |
| Memory backup for computer/ clock | 6 V [Four R6/LR6 (AA, UM-3) batteries] |
| | ● Do not use rechargeable type batteries |
| Dimensions | 529 mm (W) x 144 mm (H) x 276 mm (D) |
| Mass (For GC/GS) | 4.4 kg without batteries |
| Mass (For GT) | 4.2 kg without batteries |
| Power consumption in standby mode (For GC/GS) | 3.0 W (117 V) / 3.5W (240 V) |

| | |
|---|---|
| **Power consumption in standby mode (For GT)** | **2.7 W** |

**Notes:**

1. **Specifications are subject to change without notice.**
2. **Mass and dimensions are approximate.**

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**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

# 1. Safety Precautions

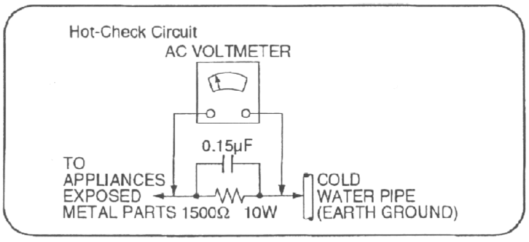
## 1.1. GENERAL GUIDELINES

1. **When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
2. **After servicing, ensure that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**
3. **After servicing, check for leakage current checks to prevent from being exposed to shock hazards.**

### 1.1.1. LEAKAGE CURRENT COLD CHECK

1. **Unplug the AC cord and connect a jumper between the two prongs on the plug.**
2. **Using an ohmmeter measure the resistance value, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1M Ω and 5.2 Ω . / When the exposed metal does not have a return path to the chassis, the reading must be $\infty$ .**

**Fig. 1**


Hot-Check Circuit
AC VOLTMETER
0.15μF
TO
APPLIANCES
EXPOSED
METAL PARTS 1500Ω 10W
COLD
WATER PIPE
(EARTH GROUND)

### 1.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15 μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. Should the measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and re-checked before it is returned to the customer.

## 2. Caution for AC Mains Lead

## Before use

Remove the connector cover.

## How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

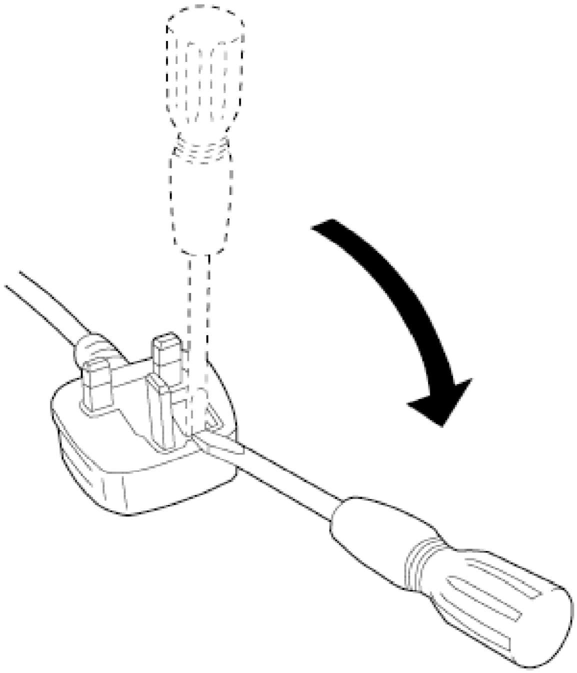
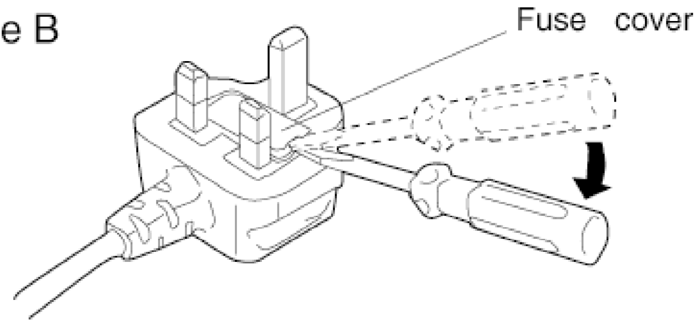


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

Figure A

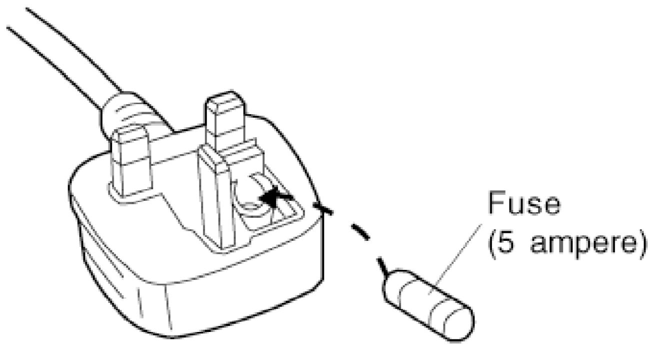
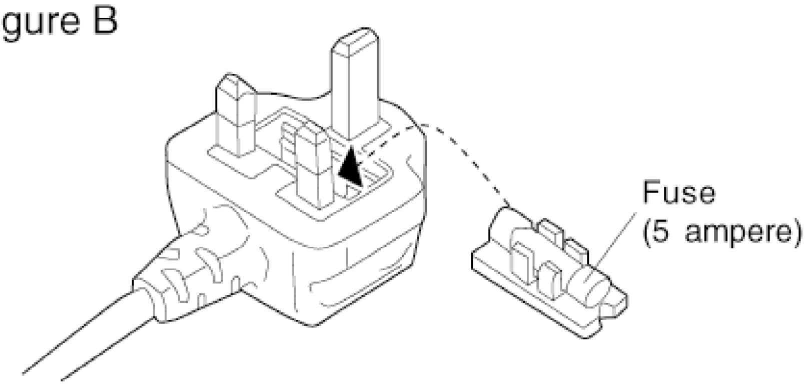


Figure B



# 3. Before Use

**Be sure to disconnect the mains cord before adjusting the voltage selector. Use a minus (-) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.**
**(If the power supply in your area is 117V or 120V, set to the “127V” position.)**
**Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; the correct voltage is already set.)**

# 4. Before Repair and Adjustment

**Disconnect AC power, discharge Power Supply Capacitors C131, C231, C301, C307, C309, C310 and C331 through a 10 Ω, 1 W resistor to ground. DO NOT SHORT-CIRCUIT DIRECTLY (with a screw driver blade, for instance), as this may destroy solid state devices.**
**After repairs are completed, restore power gradually using a variac, to avoid overcurrent.**
**( For GC/GS) Current consumption at AC 220-240 V / 117 V, 50/60 Hz in NO SIGNAL mode should be ~180 mA, ~200mA respectively.**
**(For GT) Current consumption at AC 110 V, 60 Hz in NO SIGNAL mode should be ~150 mA respectively.**

# 5. Protection Circuitry

**The protection circuitry may have operated if either of the following conditions are noticed:**

**- No sound is heard when the power is turned on.**

**- Stops during a performance.**

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are “shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

# 6. Handling the Lead Solder

## 6.1. About lead free solder (PbF)

Distinction of PbF P.C.B. :
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.
Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. / Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

# 7. Precaution of Laser Diode

CAUTION:
This unit utilizes a class 1 laser.
Invisible laser radiation is emitted from the optical pickup lens.
When the unit is turned on:

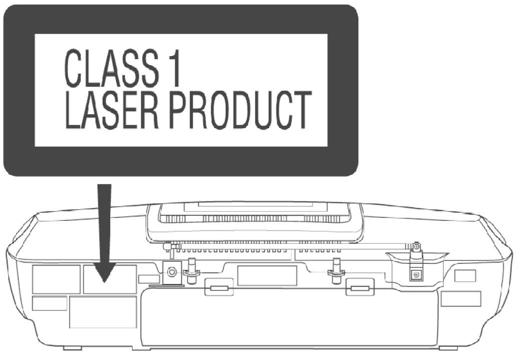
1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer’s specified

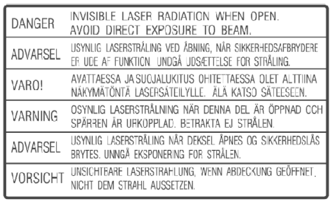
**replacement pick up only.**

6. **Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

**CAUTION!**

**THIS PRODUCT UTILIZES A LASER.**
**USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH**
**SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**





| | |
|---|---|
| DANGER | INVISIBLE LASER RADIATION WHEN OPEN.<br>AVOID DIRECT EXPOSURE TO BEAM. |
| ADVARSEL | USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE<br>ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING. |
| VARO! | AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA<br>NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN. |
| VARNING | OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH<br>SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN. |
| ADVARSEL | USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS<br>BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN. |
| VORSICHT | UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET.<br>NICHT DEM STRAHL AUSSETZEN. |

Inside of product

# 8. Handling Precautions For Traverse Deck

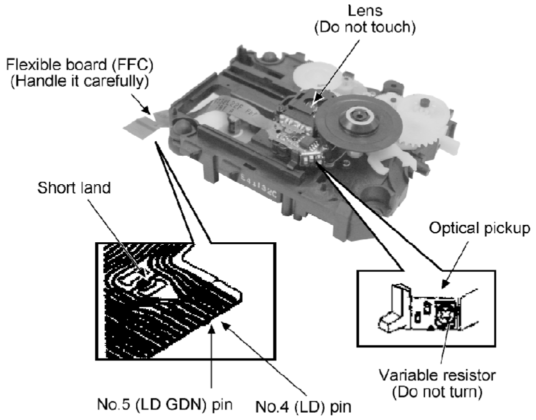
**The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.**
**So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).**

- **Handling of CD traverse deck (optical pickup)**

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **The short land between the No.4 (LD) and No.5 (GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode.**
3. **Take care not to apply excessive stress to the flexible board (FPC board) (Fig 8.1).**
4. **Do not turn the variable resistor (laser power adjustment). It has**

already been adjusted.

Fig 8.1



Lens
(Do not touch)
Flexible board (FFC)
(Handle it carefully)
Short land
Optical pickup
Variable resistor
(Do not turn)
No.5 (LD GDN) pin
No.4 (LD) pin

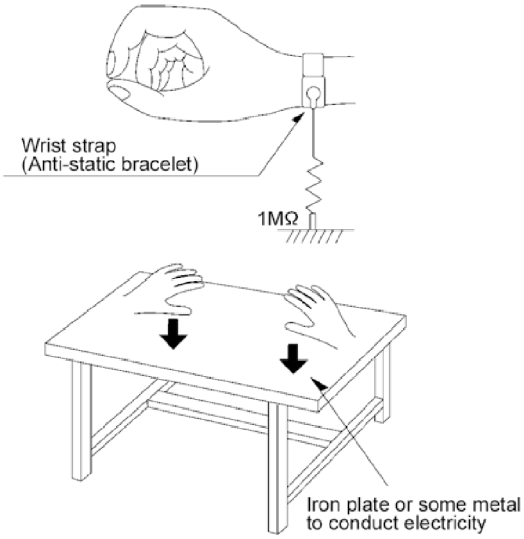
- **Grounding for electrostatic breakdown prevention**

1. **Human body grounding (Fig 8.2)**
   **Use the anti-static wrist strap to discharge the static electricity from your body.**
2. **Work table grounding (Fig 8.2)**
   **Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.**

**Caution :**

**The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).**

Fig 8.2



Wrist strap
(Anti-static bracelet)
1MΩ
Iron plate or some metal
to conduct electricity

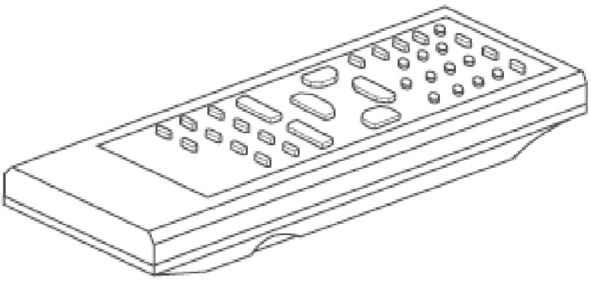
**Caution when Replacing the Optical Pickup :**

**The traverse has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.**

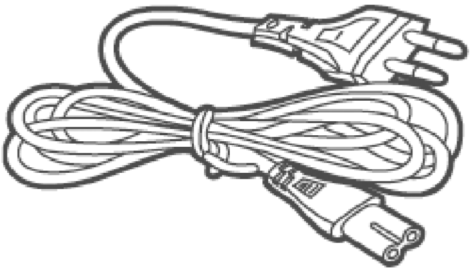
# 9. Accessories

**Note : Refer to Packing Materials & Accessories Parts List (Section 25.5) for the part number.**

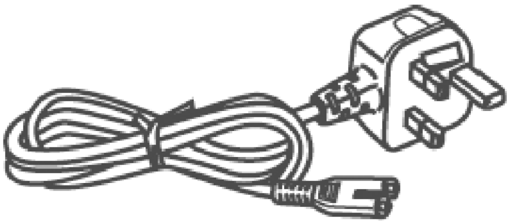
**Remote Control.....1pc**



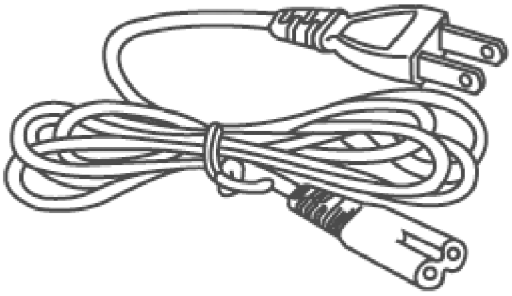
**AC cord.....1 pc (For GC)**



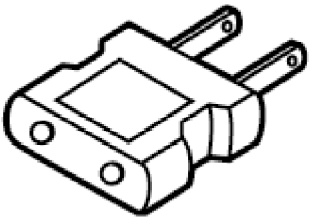
**AC cord.....1 pc (For GS)**



**AC cord.....1 pc (For GT)**



AC cord adaptor.....1 pc (For GC)



# 10. Operation Procedures

## 10.1. Main unit

## 10.2. Remote control

# 11. Information on MP3

# 12. Disassembly and Main Component Replacement Procedures and Operational Check

**"ATTENTION SERVICER"**
**Some chassis components may be have sharp edges. Be careful when disassembly and servicing.**

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures. / Special reassembly procedures are described only when required.**
3. **Select items from the following index when checks or replacement are required.**

**Warning:**

**This product uses a laser diode. Refer to "Precaution of Laser**

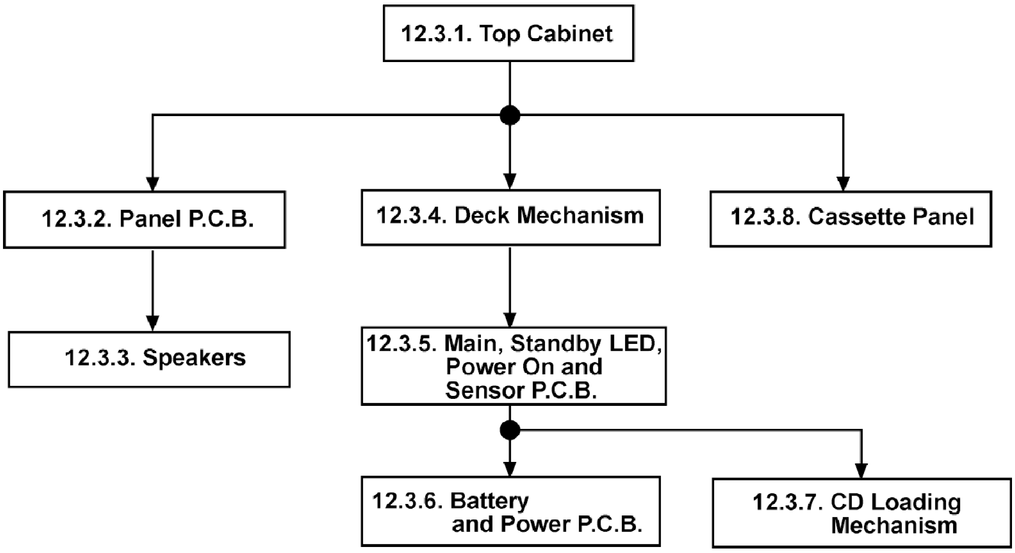
**Diode”.**

## 12.1. Disassembly procedures

**12.3. Checking Procedure for each major P.C.B.**
**12.3.1 Disassembly of Top Cabinet Unit.**
**12.3.2 Disassembly of Panel P.C.B.**
**12.3.3 Disassembly of Speakers.**
**12.3.4 Disassembly of Deck Mechanism.**
**12.3.5 Disassembly of Main, Standby LED, Power On and Sensor P.C.B.**
**12.3.6 Disassembly of Battery and Power P.C.B.**
**12.3.7 Disassembly of CD Loading Mechanism.**
**12.3.8 Replacement of Cassette Panel.**

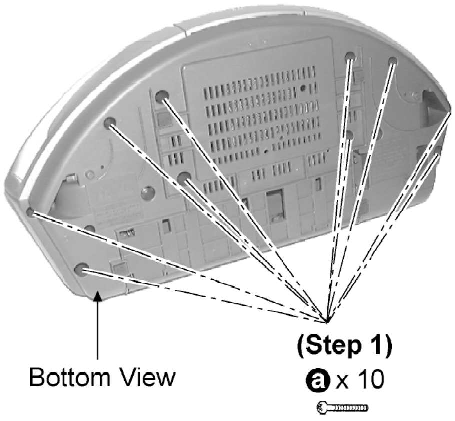
## 12.2. Disassembly flow chart

**The following chart is the procedure for disassembling the unit and inside parts for internal inspection when carrying out the servicing.**
**To assemble the unit, reverse the steps shown in the chart below.**

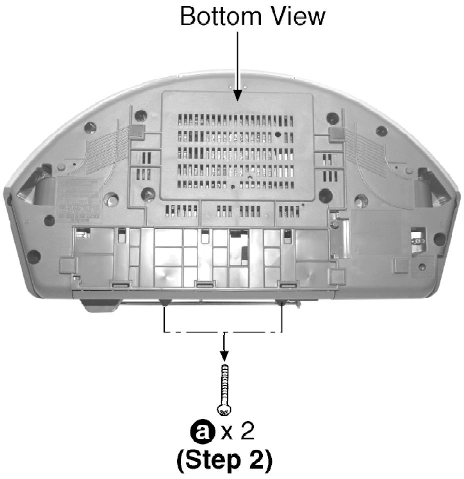

12.3.1. Top Cabinet
12.3.2. Panel P.C.B.
12.3.4. Deck Mechanism
12.3.8. Cassette Panel
12.3.3. Speakers
12.3.5. Main, Standby LED, Power On and Sensor P.C.B.
12.3.6. Battery and Power P.C.B.
12.3.7. CD Loading Mechanism

## 12.3. Checking Procedure for each major P.C.B.

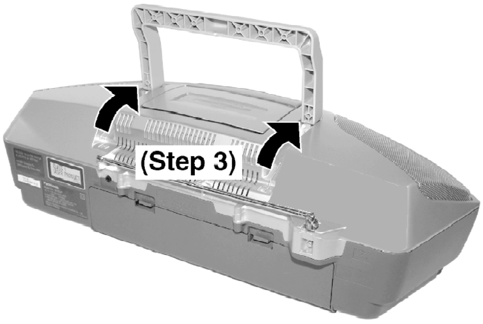
### 12.3.1. Disassembly of Top Cabinet Unit.


Bottom View
(Step 1)
a x 10

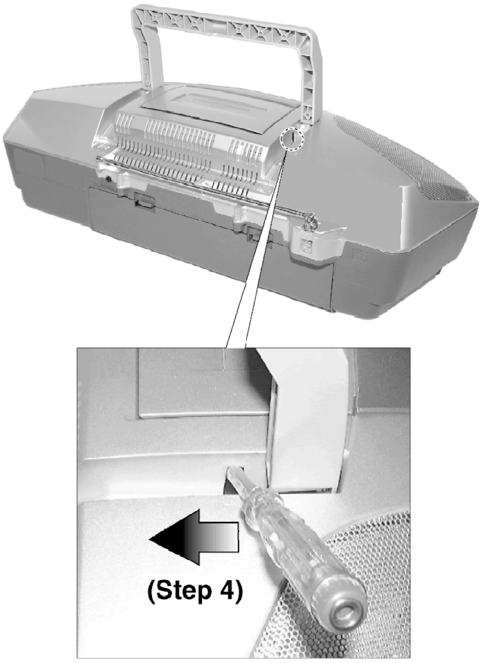
**Step 1: Remove 10 screws.**


Bottom View
a x 2
(Step 2)

**Step 2: Remove 2 screws.**

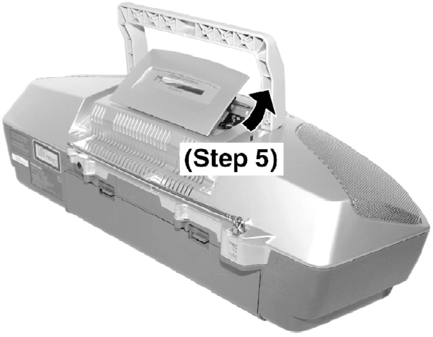


**Step 3: Flip up the handle as arrow direction shown.**

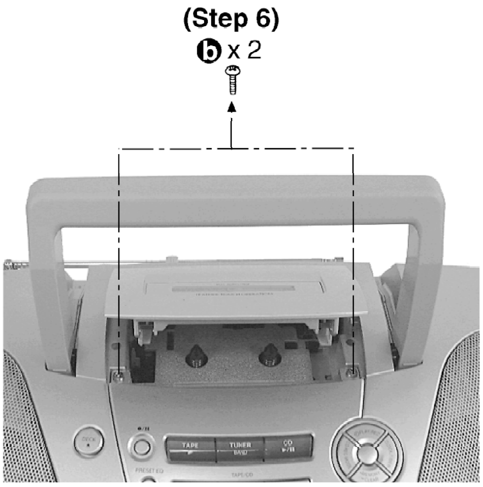


**Step 4: Use a screw driver and insert into the hole. Slide the screw driver to the direction shown to open the cassette panel.**

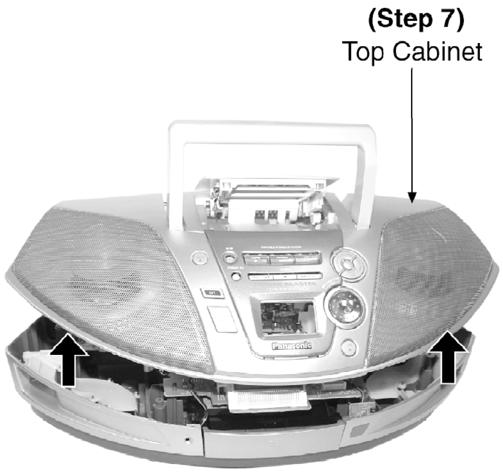
**Note: Be careful not to exert strong force as it may cause damage to the chassis.**



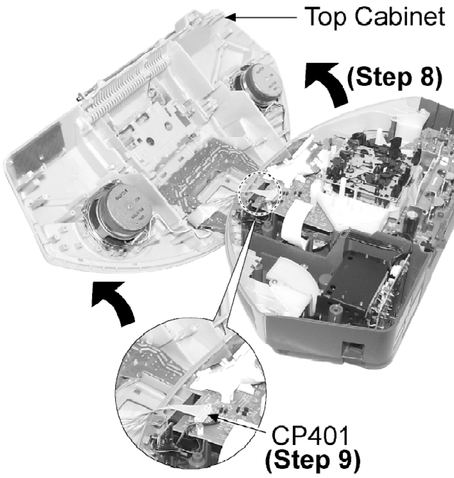
**Step 5: Cassette panel will automatically open.**



**Step 6: Remove 2 screws.**


(Step 7)
Top Cabinet

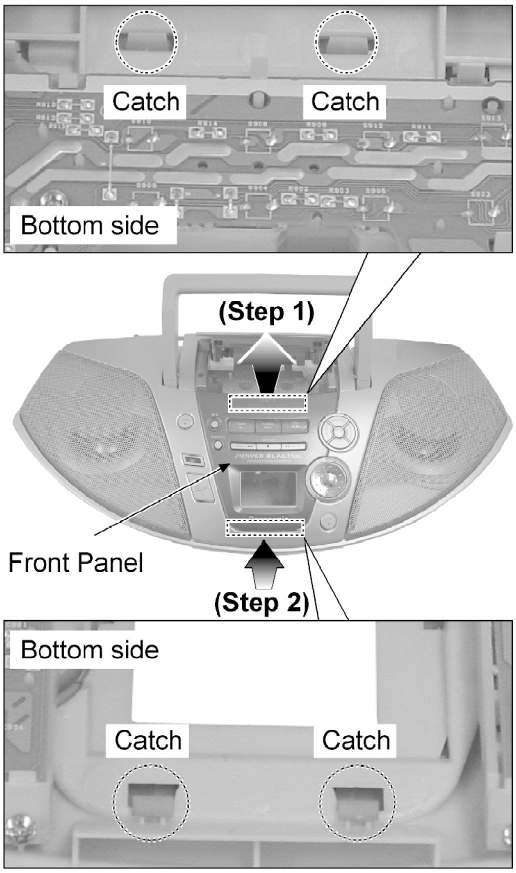
**Step 7: Lift up the top cabinet as arrow shown.**


Top Cabinet
(Step 8)
CP401
(Step 9)

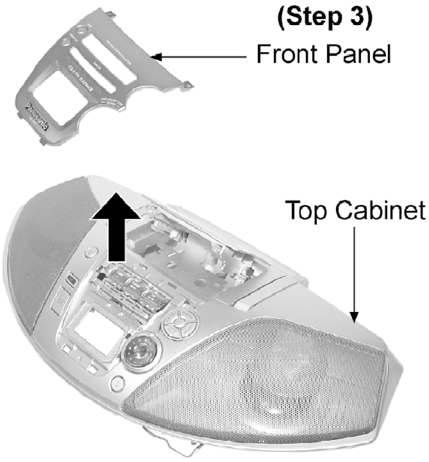
**Step 8: Flip the top cabinet over as arrow shown.**
**Step 9: Detach the FFC wire (CP401).**

### 12.3.2. Disassembly of Panel P.C.B.

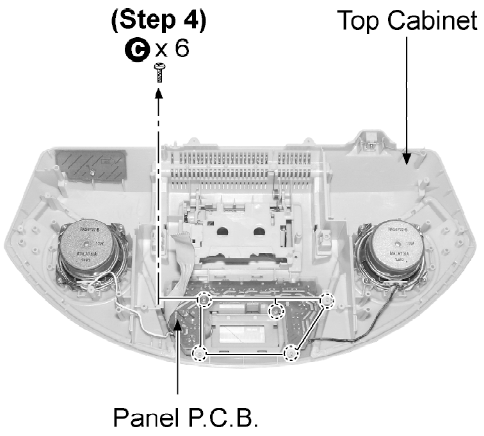
**Follow (step 1) to (step 9) of item 12.3.1.**


Catch
Catch
Bottom side
(Step 1)
Front Panel
(Step 2)
Bottom side
Catch
Catch

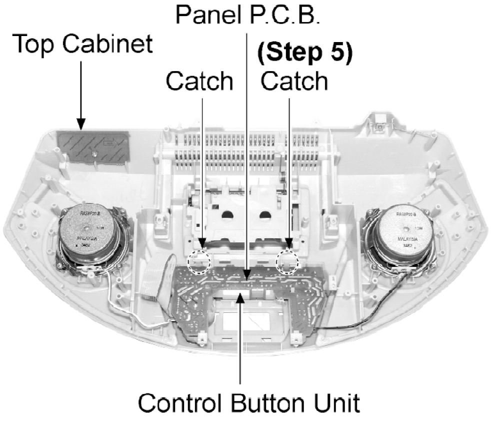
**Step 1: Lift the upper section of the front panel slightly towards you as arrow shown.**
**Step 2: While lifting, push the lower section of the front panel in the direction shown by the arrow to release the catches.**


(Step 3)
Front Panel
Top Cabinet

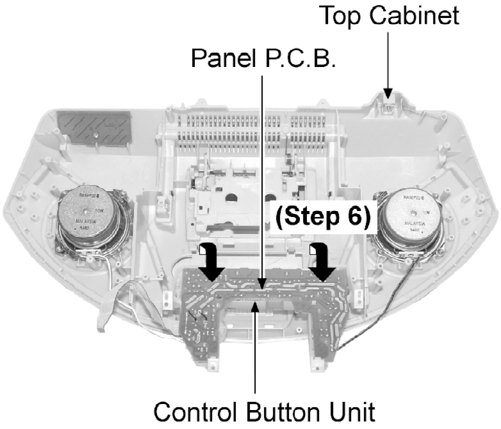
**Step 3: Remove the front panel from top cabinet as arrow shown.**


(Step 4)
C x 6
Top Cabinet
Panel P.C.B.

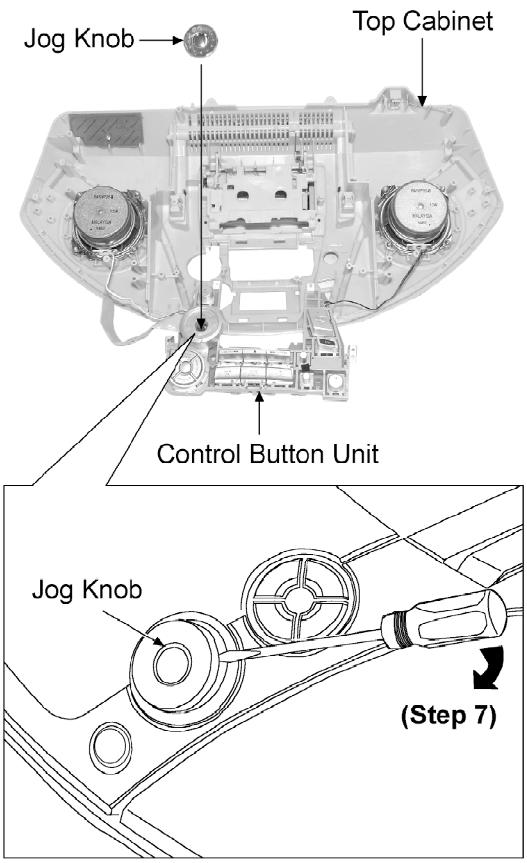
**Step 4: Remove 6 screws.**


Panel P.C.B.
Top Cabinet
(Step 5)
Catch
Catch
Control Button Unit

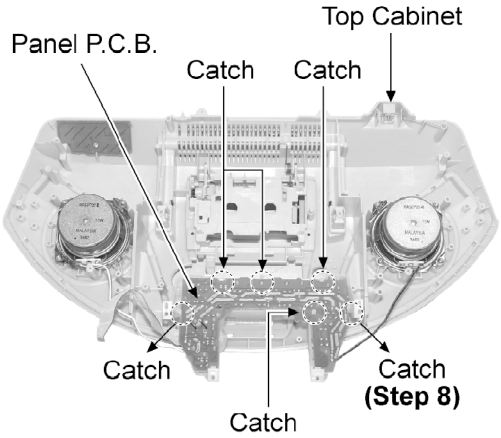
**Step 5: Release 2 catches.**


Top Cabinet
Panel P.C.B.
(Step 6)
Control Button Unit

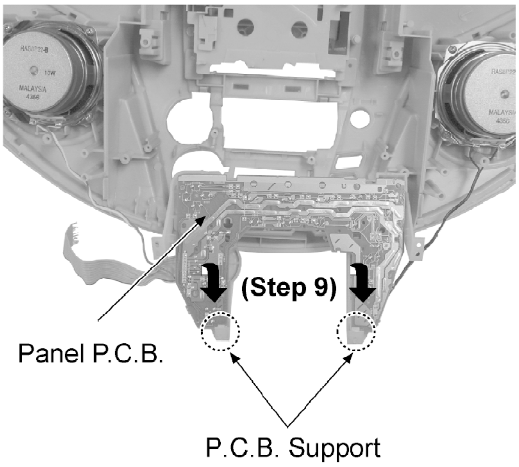
**Step 6: Flip over the control button unit with the Panel P.C.B. as arrow shown.**


Jog Knob
Top Cabinet
Control Button Unit
Jog Knob
(Step 7)

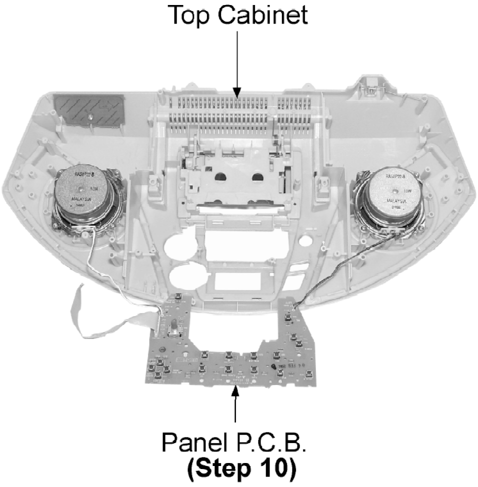
**Step 7: Remove the Jog Knob using a screwdriver as arrow shown.**
**Caution: Do not exert strong force as it may cause damage to the top cabinet.**


Panel P.C.B.
Catch
Catch
Top Cabinet
Catch
Catch
(Step 8)
Catch

**Step 8: Release 6 catches.**


(Step 9)
Panel P.C.B.
P.C.B. Support

**Step 9: Remove the Panel P.C.B. as arrow shown.**

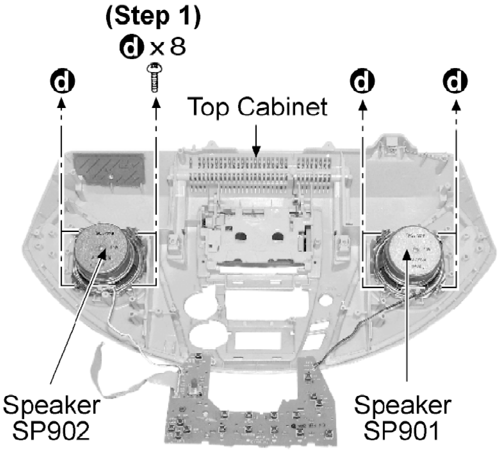

Top Cabinet
Panel P.C.B.
(Step 10)

**Step 10: Flip the Panel P.C.B. over.**

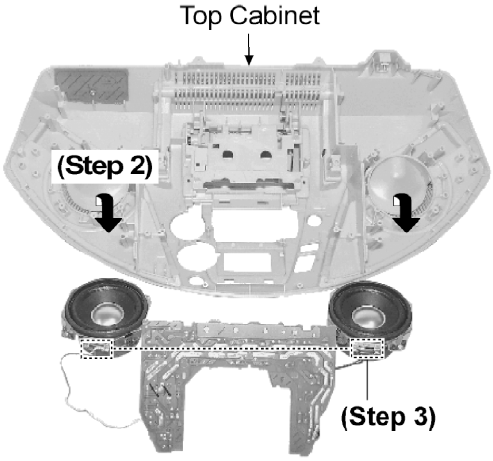
### 12.3.3. Disassembly of Speakers.

**Follow (step 1) to (step 9) of item 12.3.1.**

**Follow (step 1) to (step 10) of item 12.3.2.**


(Step 1)
d × 8
d
d
d
Top Cabinet
Speaker
SP902
Speaker
SP901

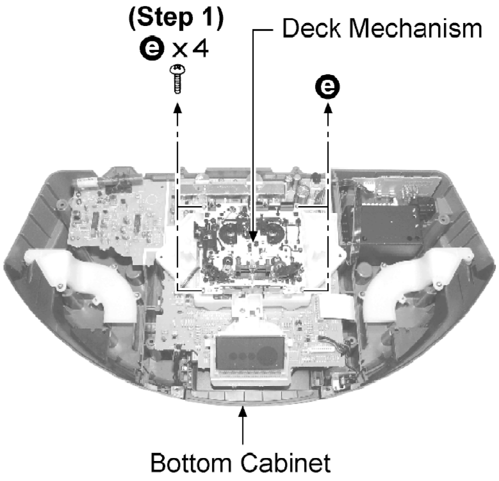
**Step 1: Remove 8 screws.**


Top Cabinet
(Step 2)
(Step 3)

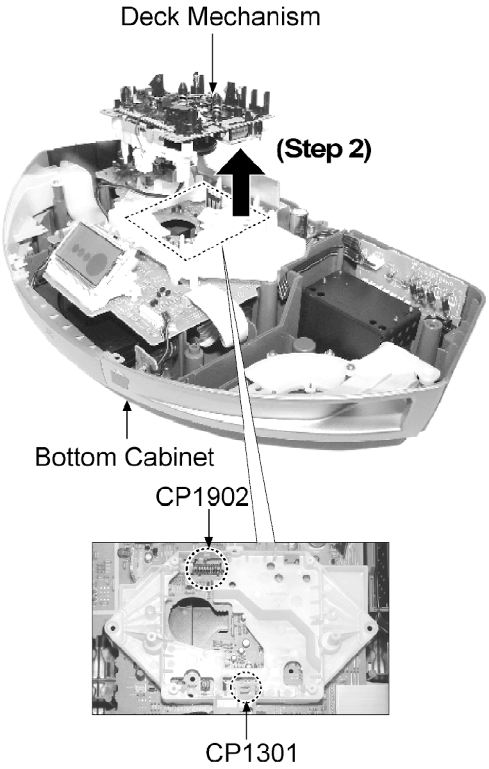
**Step 2: Flip the both side speakers as arrow shown.**
**Step 3: Desolder the wire at speaker terminal to remove speaker.**

### 12.3.4. Disassembly of Deck Mechanism.

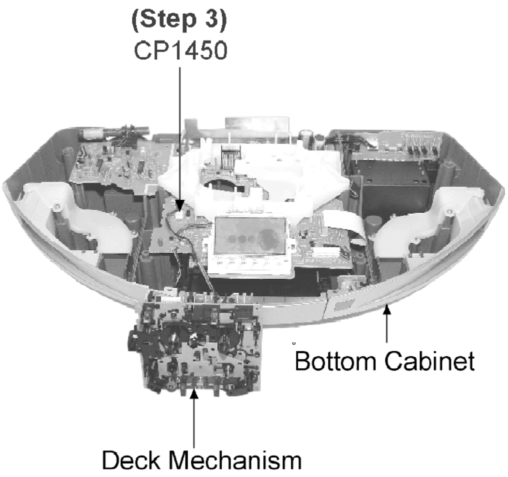
**Follow (step 1) to (step 9) of item 12.3.1.**


(Step 1)
ⓔ x 4
Deck Mechanism
ⓔ
Bottom Cabinet

**Step 1: Remove 4 screws.**


Deck Mechanism
(Step 2)
Bottom Cabinet
CP1902
CP1301

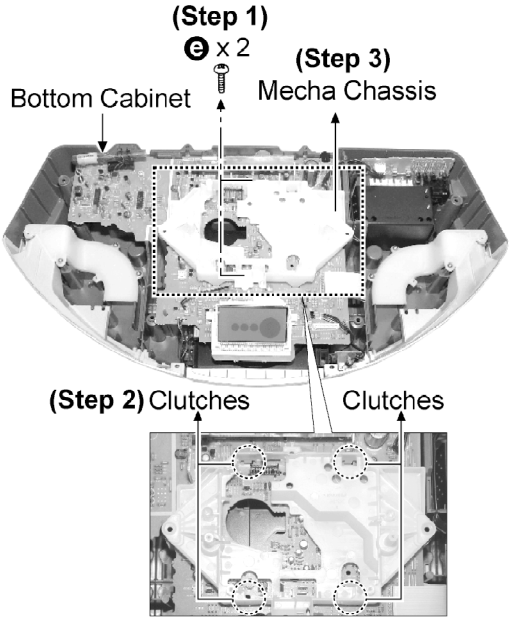
**Note: Be careful of connectors (CP1301 & CP1902) while removing the deck mechanism.**
**Step 2: Remove the deck mechanism as arrow shown.**


(Step 3)
CP1450
Bottom Cabinet
Deck Mechanism

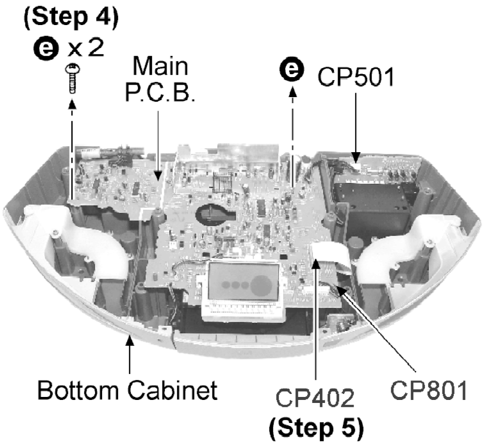
**Step 3: Release the connector (CP1450) to remove the deck mechanism.**

### 12.3.5. Disassembly of Main, Standby LED, Power On and Sensor P.C.B.

**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**

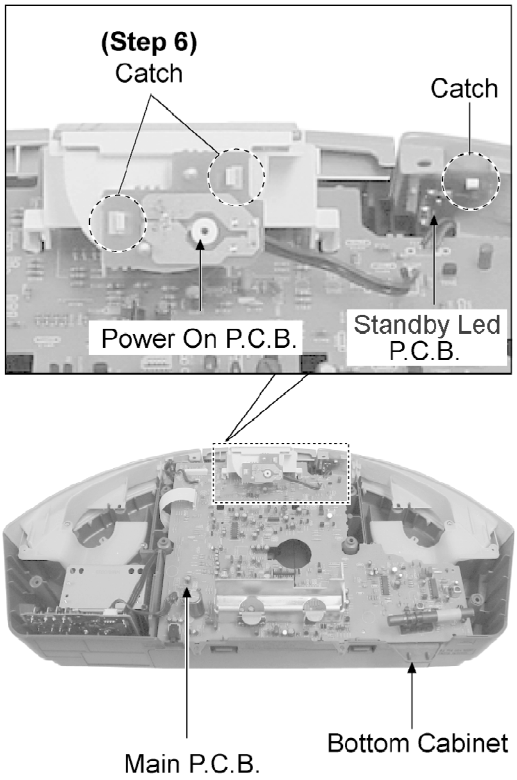

(Step 1)
x 2
Bottom Cabinet
(Step 3)
Mecha Chassis
(Step 2) Clutches
Clutches

**Step 1: Remove 2 screws.**
**Step 2: Release 4 clutches.**
**Step 3: Remove the Mecha Chassis.**

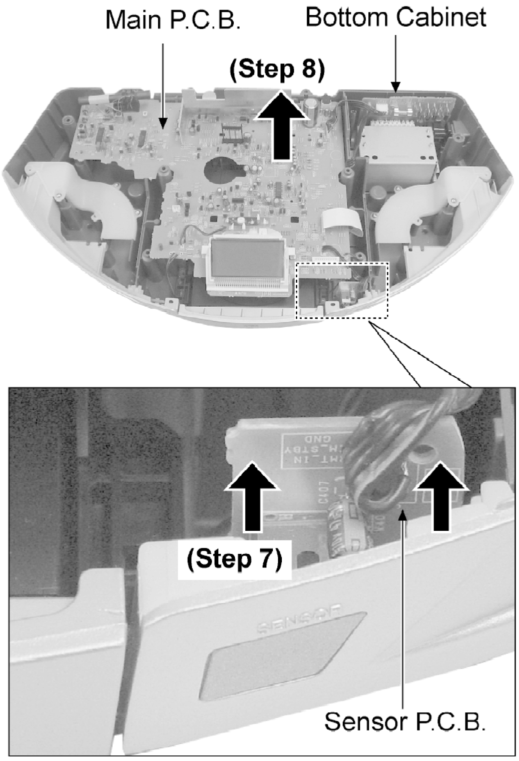

(Step 4)
e x 2
Main P.C.B.
e
CP501
Bottom Cabinet
CP402
(Step 5)
CP801

**Step 4: Remove 2 screws.**

**Step 5: Release all the connectors (CP501, CP402 & CP801).**


(Step 6)
Catch
Catch
Power On P.C.B.
Standby Led P.C.B.
Main P.C.B.
Bottom Cabinet

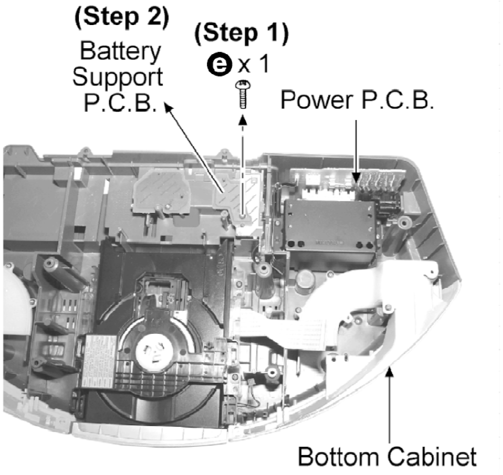
**Step 6: Release 3 Catches and remove Power On P.C.B. and standby Led P.C.B..**


Main P.C.B.
Bottom Cabinet
(Step 8)
(Step 7)
Sensor P.C.B.

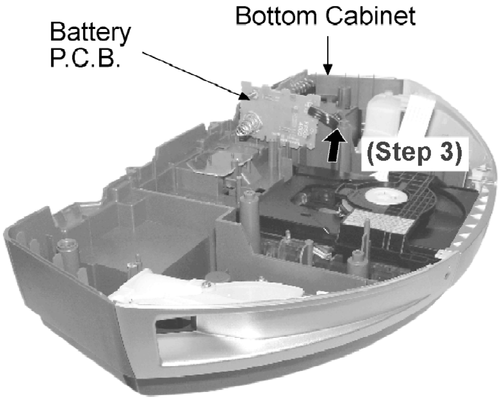
**Step 7: Release the Sensor P.C.B. as arrow shown.**
**Step 8: Remove the Main P.C.B. as arrow shown.**

### 12.3.6. Disassembly of Battery and Power P.C.B.

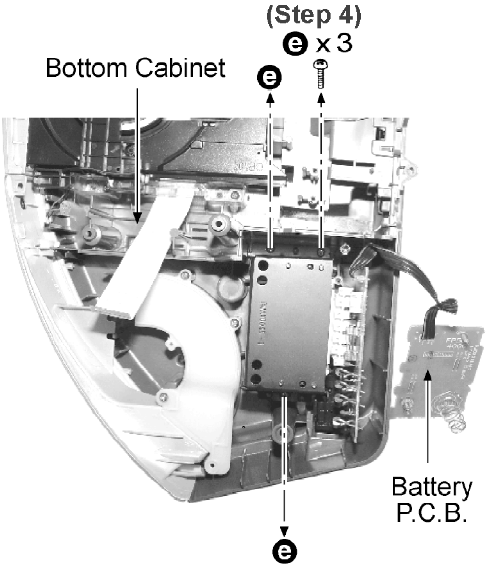
**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**
**Follow (step 1) to (step 8) of item 12.3.5.**


(Step 2)
Battery Support P.C.B.
(Step 1)
ⓔ x 1
Power P.C.B.
Bottom Cabinet

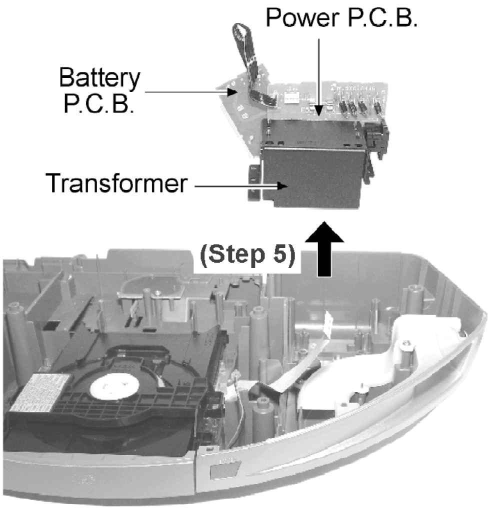
**Step 1: Remove 1 screw.**
**Step 2: Remove the Battery Support P.C.B..**
**Note: Remember to place the Battery Support P.C.B. to original location.**


Battery
P.C.B.
Bottom Cabinet
(Step 3)

**Step 3: Remove the Battery P.C.B. as arrow shown.**


(Step 4)
e x 3
Bottom Cabinet
e
Battery
P.C.B.
e

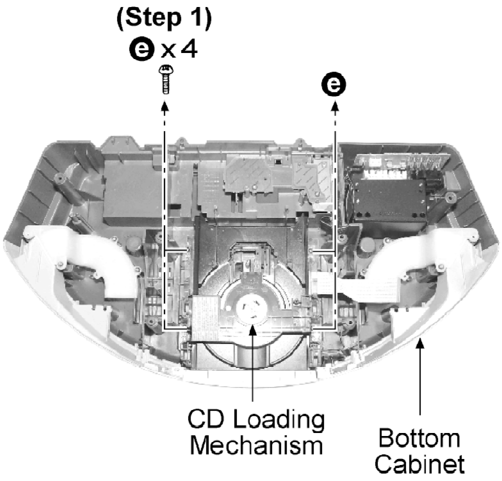
**Step 4: Remove 3 screws.**


Power P.C.B.
Battery P.C.B.
Transformer
(Step 5)

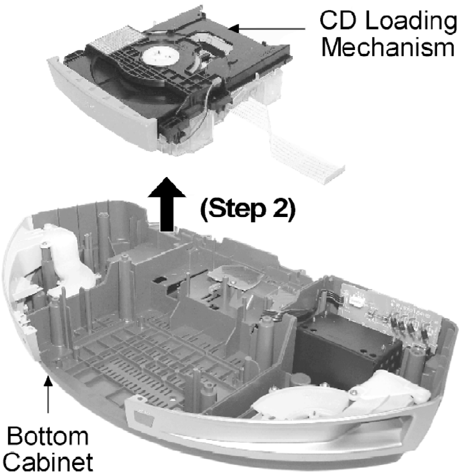
**Step 5: Remove the transformer together with battery P.C.B. and Power P.C.B. as arrow shown.**

## 12.3.7. Disassembly of CD Loading Mechanism.

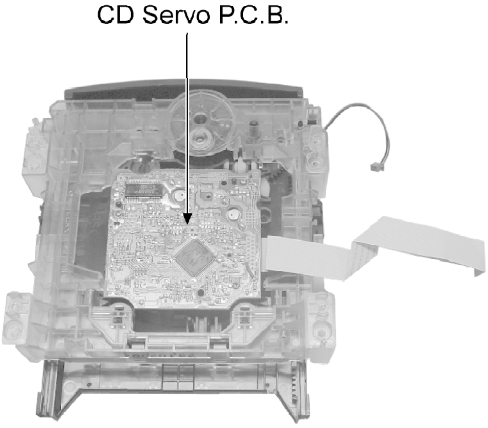
**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**
**Follow (step 1) to (step 8) of item 12.3.5.**


(Step 1)
ⓔ x 4
ⓔ
CD Loading Mechanism
Bottom Cabinet

**Step 1: Remove 4 screws.**

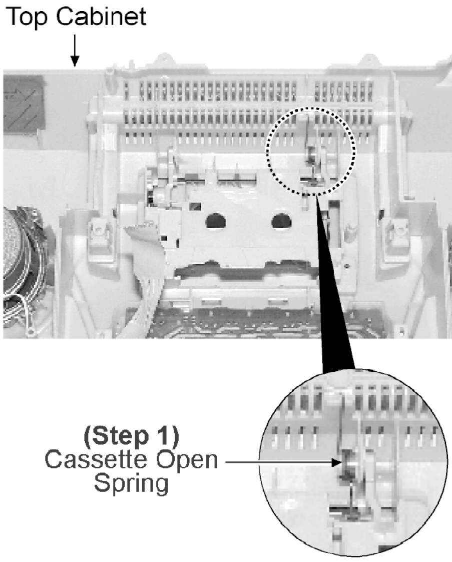

CD Loading Mechanism
(Step 2)
Bottom Cabinet

**Step 2: Remove the CD Loading Mechanism as arrow shown.**

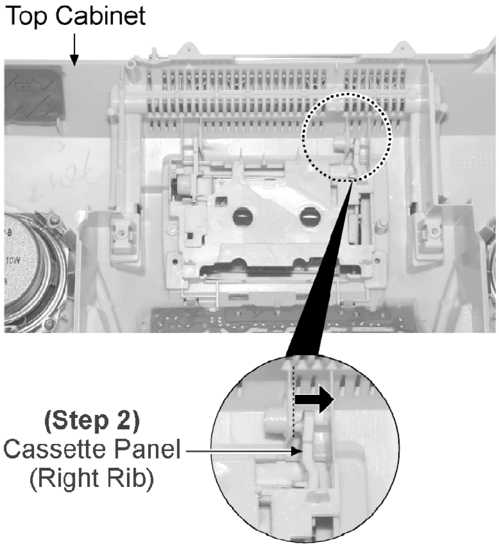

CD Servo P.C.B.

## 12.3.8. Replacement of Cassette Panel.

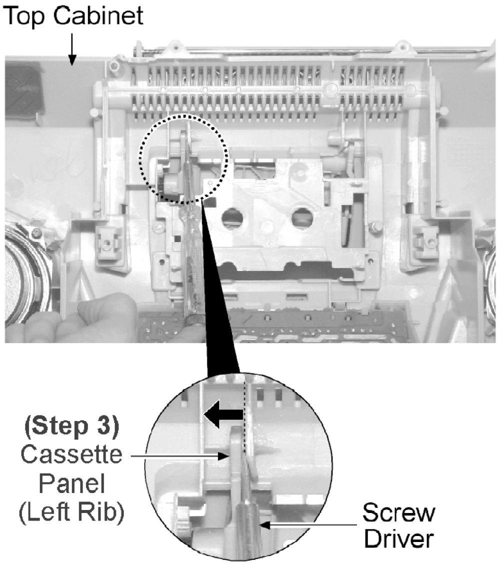
**Follow (step 1) to (step 9) of item 12.3.1.**


Top Cabinet
(Step 1)
Cassette Open
Spring

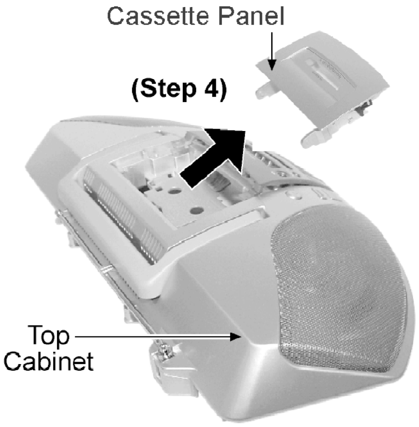
**Step 1: Remove the cassette open spring.**


Top Cabinet
(Step 2)
Cassette Panel
(Right Rib)

**Step 2: Push the cassette panel slowly to the right.**


Top Cabinet
(Step 3)
Cassette
Panel
(Left Rib)
Screw
Driver

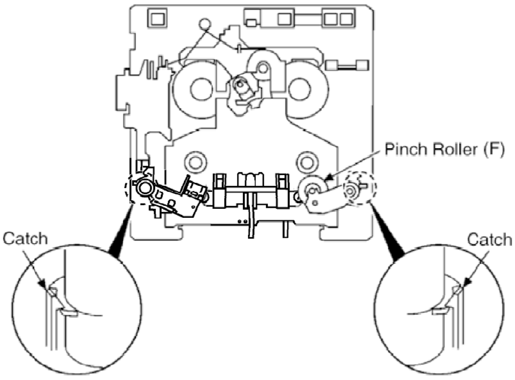
**Step 3: Push the cassette panel slowly to the left using a screw driver.**
**Caution: Be careful of using/exerting strong forces.**


Cassette Panel
(Step 4)
Top
Cabinet

**Step 4: Remove the cassette panel from top cabinet as arrow shown.**

## 12.4. Procedures for Replacing Pinch Roller and Head Block (Deck Mechanism Unit)

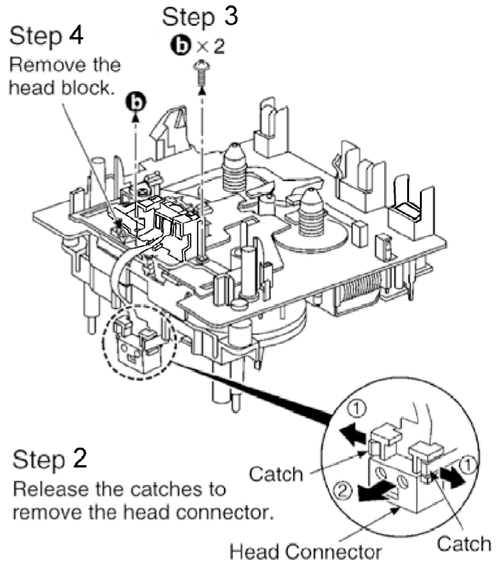
**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**



Step 1

Release catches to remove the pinch rollers (F).

Pinch Roller (F)
Catch
Catch



Step 4

Remove the head block.

Step 3

b × 2

Step 2

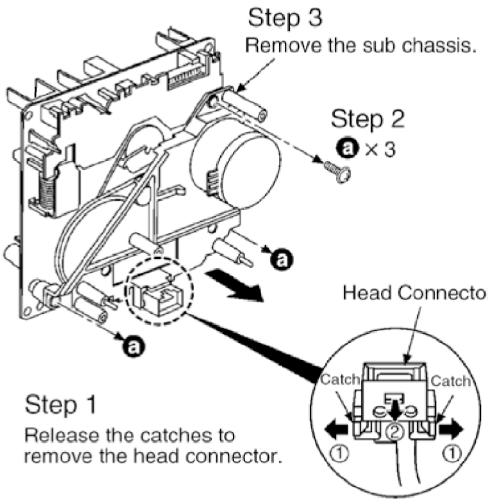
Release the catches to remove the head connector.

b
①
Catch
②
①
Head Connector
Catch

## 12.5. Procedures for Replacing Motor, Capstan Belt A, Capstan Belt B, and Winding Belt (Deck Mechanism Unit)

**Follow (step 1) to (step 9) of item 12.3.1.**

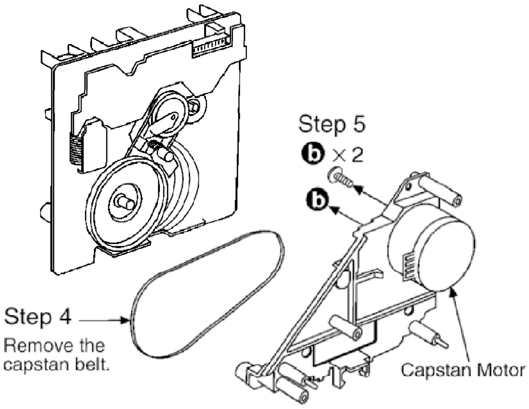
**Follow (step 1) to (step 3) of item 12.3.4.**


Step 3
Remove the sub chassis.

Step 2
ⓐ × 3

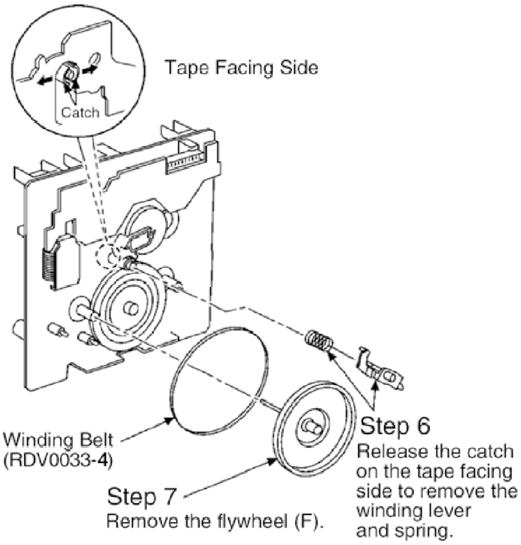
Step 1
Release the catches to remove the head connector.

ⓐ
ⓐ
Head Connector
Catch
Catch
①
②
①


Step 5
ⓑ × 2

Step 4
Remove the capstan belt.

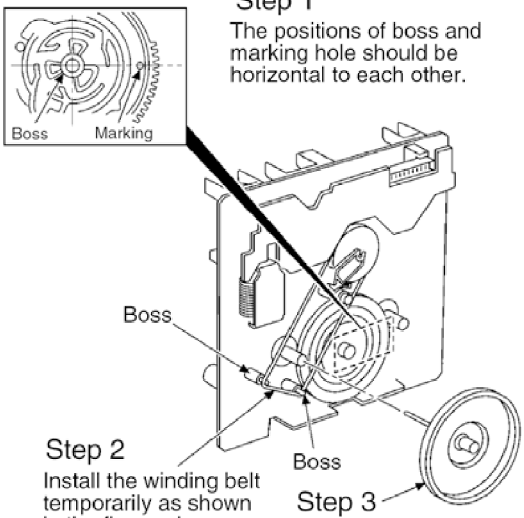
ⓑ
Capstan Motor


Step 6
Release the catch on the tape facing side to remove the winding lever and spring.

Step 7
Remove the flywheel (F).

Tape Facing Side
Catch
Winding Belt
(RDV0033-4)

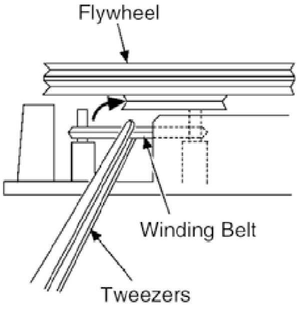
**Installing Belt**


Boss
Marking
Boss
Boss

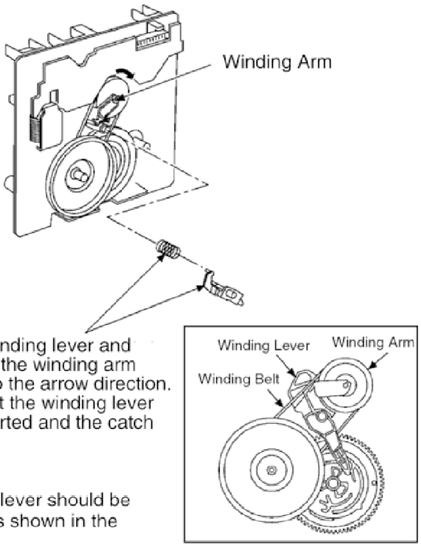
**Step 1**
The positions of boss and marking hole should be horizontal to each other.

**Step 2**
Install the winding belt temporarily as shown in the figure above.

**Step 3**
Attach the flywheel (F).


Flywheel
Winding Belt
Tweezers

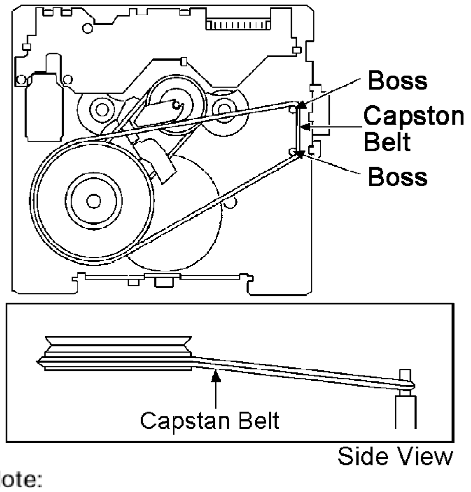
**Step 4**
Catch the winding belt on the flywheel (F).


Winding Arm
Winding Lever
Winding Arm
Winding Belt

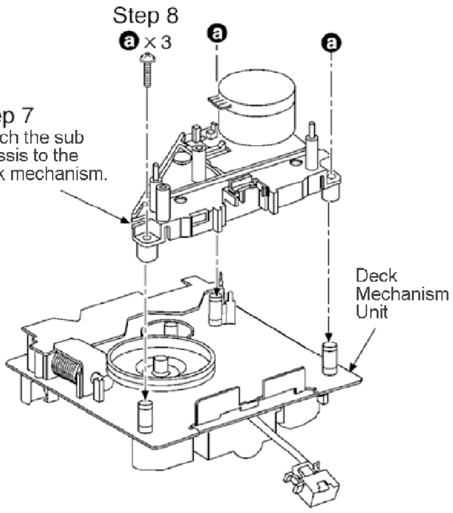
**Step 5**
Install the winding lever and spring while the winding arm is pressed to the arrow direction. (Be sure that the winding lever is firmly inserted and the catch is hooked.)

**Note:**
The winding lever should be positioned as shown in the right figure.

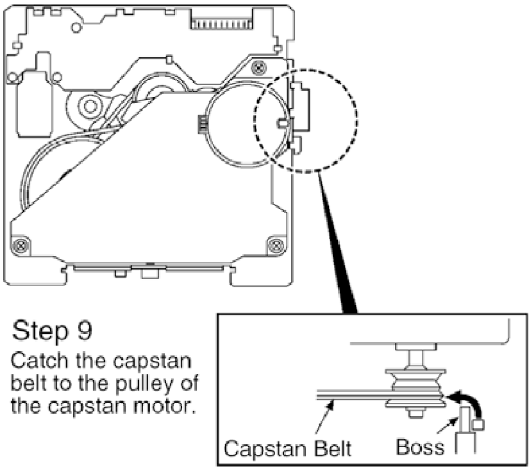
Step 6
Install the capstan belt temporarily as shown in the figure below.


Boss
Capston Belt
Boss
Capstan Belt
Side View

Note:
Keep the belt away from grease.


Step 8
a × 3
a
a
Deck Mechanism Unit

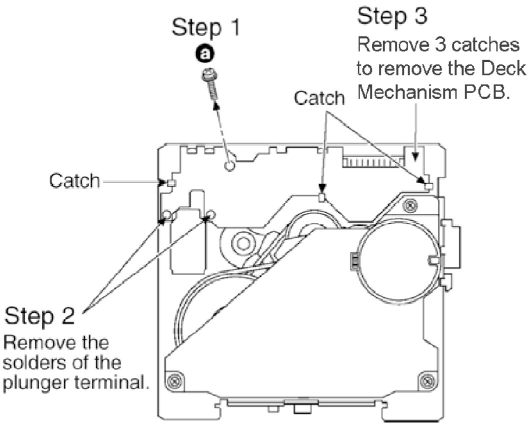
Step 7
Attach the sub chassis to the deck mechanism.


Capstan Belt
Boss

Step 9
Catch the capstan belt to the pulley of the capstan motor.

## 12.6. Procedures for Replacing Parts on Deck Mechanism PCB

**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**



Step 1

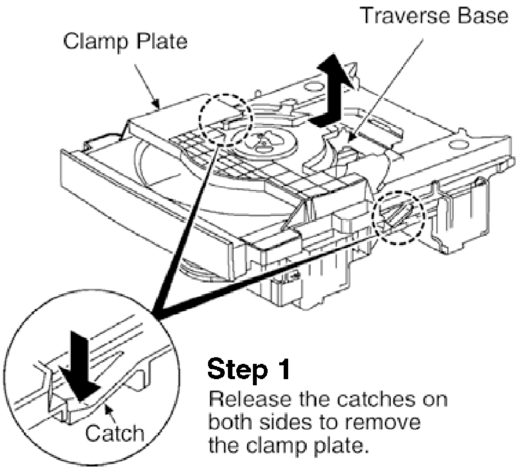
Step 3
Remove 3 catches to remove the Deck Mechanism PCB.

Step 2
Remove the solders of the plunger terminal.

## 12.7. Procedures of Replacing Traverse Base (Unit), Driving Gear, and Cam Gear (CD Mechanism Unit)

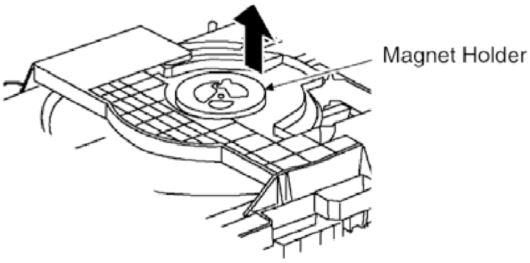
### 12.7.1. Disassembly of the Disc Tray.

**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**
**Follow (step 1) to (step 8) of item 12.3.5.**
**Follow (step 1) to (step 2) of item 12.3.7.**



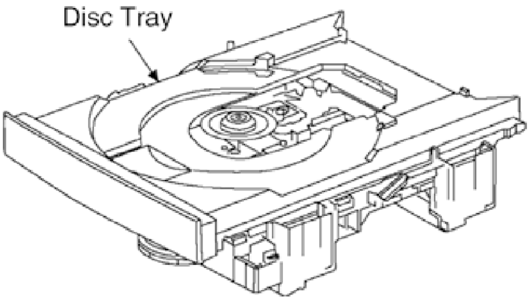
**Step 1**
Release the catches on both sides to remove the clamp plate.

Note:
When the magnet attracts the traverse base (JUN) that is set to UP, lift the magnet holder backward to remove the clamp plate.



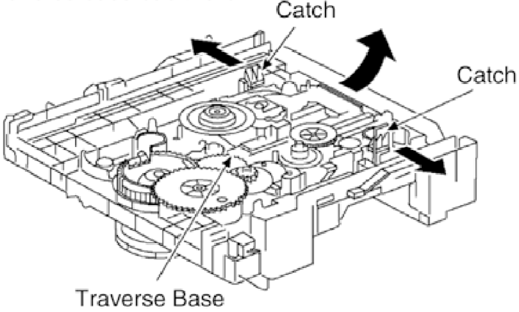
**Step 2**

Remove the disc tray upward.



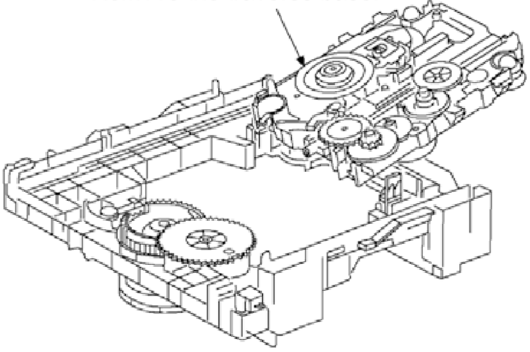
**Step 3**

Release 2 catches to pull up the traverse base backward.


Catch
Catch
Traverse Base

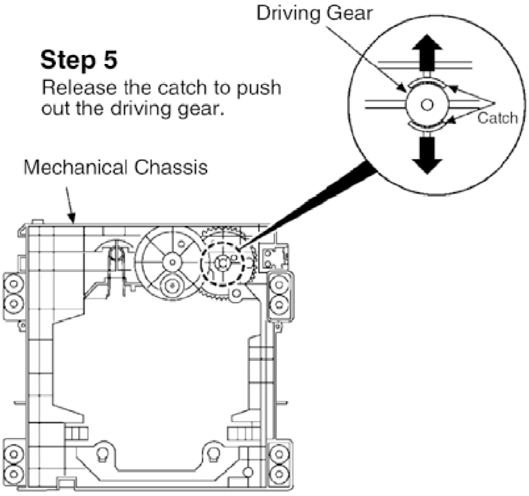
**Step 4**

Remove the traverse base.



**Step 5**

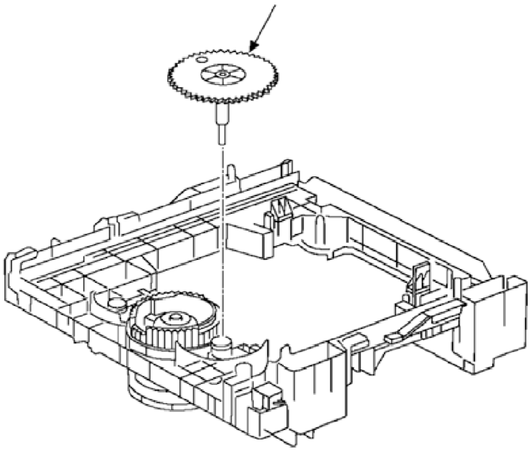
Release the catch to push out the driving gear.


Driving Gear
Catch
Mechanical Chassis

(Bottom View)

**Step 6**

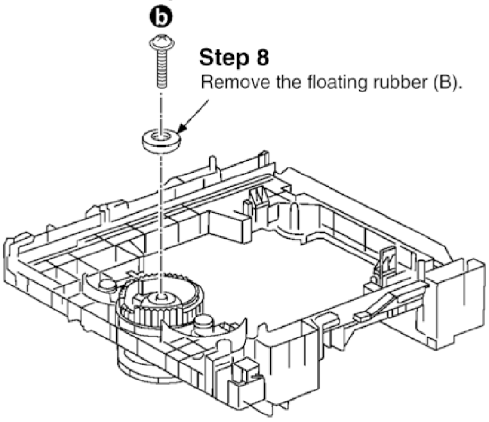
Pull out the driving gear.

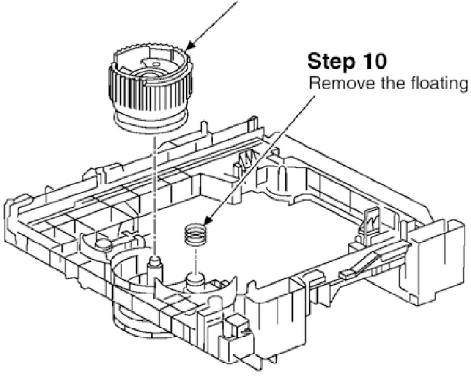


**Step 7**

**Step 8**

Remove the floating rubber (B).



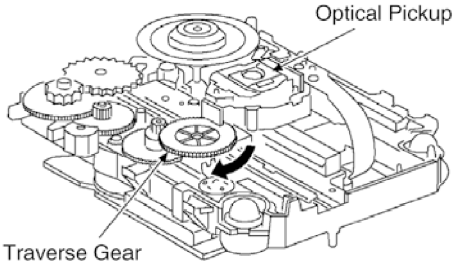


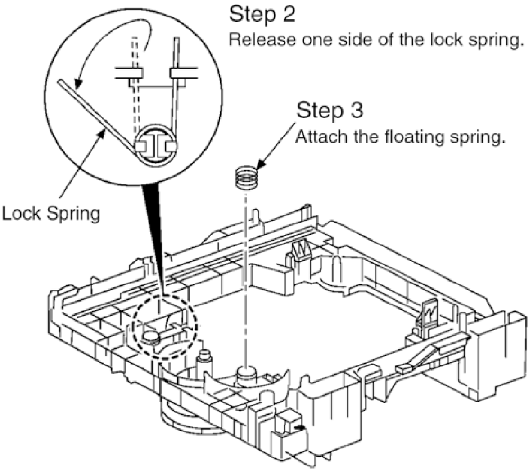
**Step 9**
Remove the cam gear.

**Step 10**
Remove the floating spring.

## Assembly of Traverse Base, Cam Gear, Driving Gear, Disc Tray, and Clam Plate

Step 1
Turn the traverse gear (B) to the arrow direction, and move the optical pickup to the center.


Optical Pickup
Traverse Gear



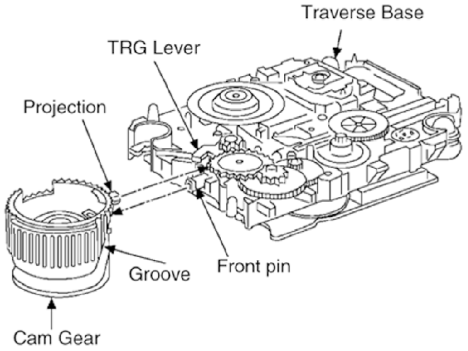
Step 2
Release one side of the lock spring.

Step 3
Attach the floating spring.

Lock Spring

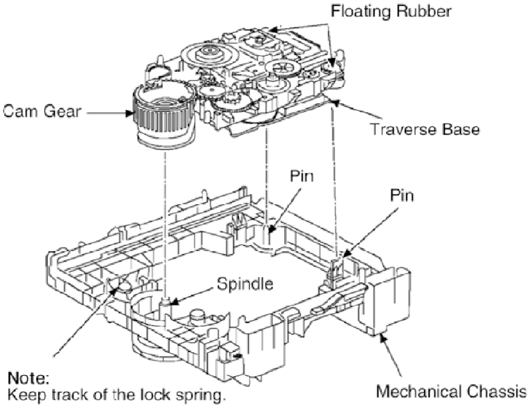
### Step 4

Engage the front pin of the traverse gear to the groove of the cam gear and the projection of the cam gear between the TRG lever.
(so that the gear is automatically engaged)

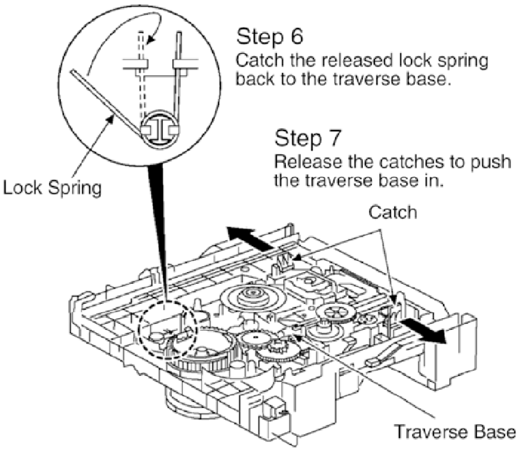

Traverse Base
TRG Lever
Projection
Groove
Front pin
Cam Gear

### Step 5

Hold the assembled part carefully. Engage the cam gear to the spindle of the mechanical chassis and the floating rubber of the traverse base to the pin of the mechanical chassis.


Floating Rubber
Cam Gear
Traverse Base
Pin
Pin
Spindle
Mechanical Chassis

**Note:**
Keep track of the lock spring.


Lock Spring
Catch
Traverse Base

### Step 6

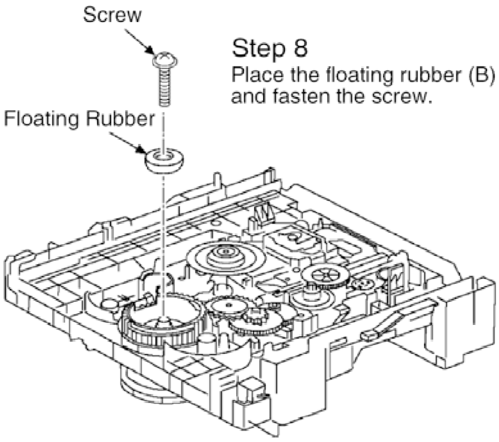
Catch the released lock spring back to the traverse base.

### Step 7

Release the catches to push the traverse base in.

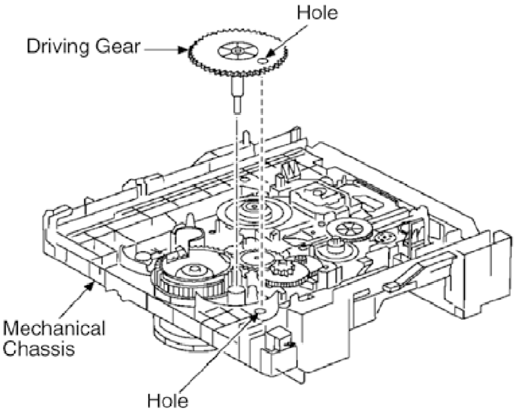
## Step 8

Place the floating rubber (B) and fasten the screw.


Screw
Floating Rubber

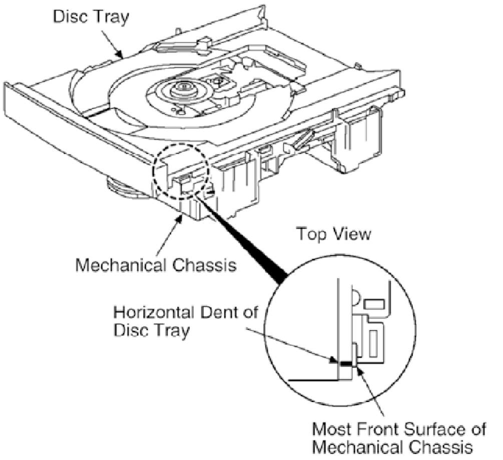
## Step 9

Put together the holes located on the driving gear and the mechanical chassis, and push down the driving gear till a click sound is heard.

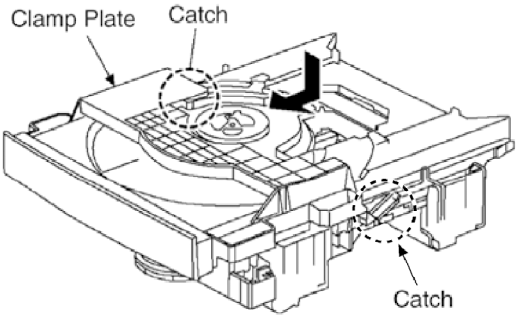

Hole
Driving Gear
Mechanical Chassis
Hole

## Step 10

Position the disc tray where the horizontal dent located in the most right exterior of the disc tray is attached to the front surface located in the right most exterior of the mechanical chassis.

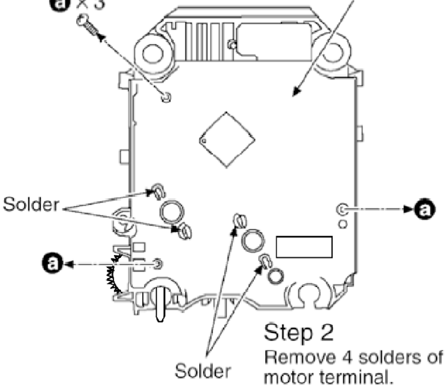

Disc Tray
Top View
Mechanical Chassis
Horizontal Dent of Disc Tray
Most Front Surface of Mechanical Chassis

Step 11
Insert the clamp plate from the top to attach over the catch.


Clamp Plate
Catch
Catch

## 12.8. Procedures for Replacing Optical Pickup (CD Mechanism Unit)

**Follow (step 1) to (step 9) of item 12.3.1.**
**Follow (step 1) to (step 3) of item 12.3.4.**
**Follow (step 1) to (step 8) of item 12.3.5.**
**Follow (step 1) to (step 2) of item 12.3.7.**
**Follow (step 1) to (step 4) of item 12.6.1.**

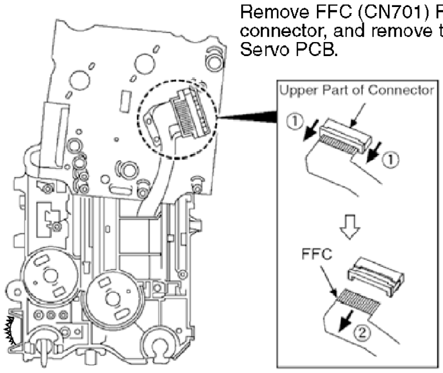

a
a
Solder
Solder

Step 1
a × 3

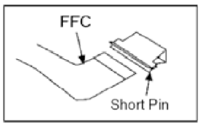
Step 2
Remove 4 solders of the motor terminal.

Step 3
Remove the CD Servo PCB and turn it over.

Step 4
Remove FFC (CN701) From the connector, and remove the CD Servo PCB.

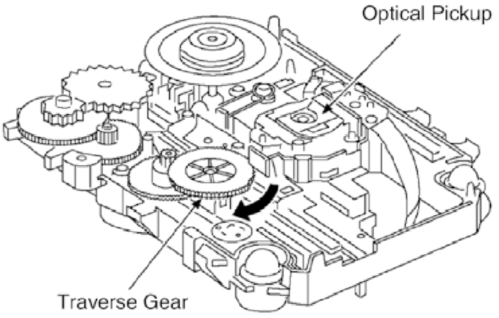

Upper Part of Connector
①
①
FFC
②

**Note:**
Insert the short pin to FFC of the optical pickup.
(Refer to "Note on Handling Optical Pickup".)

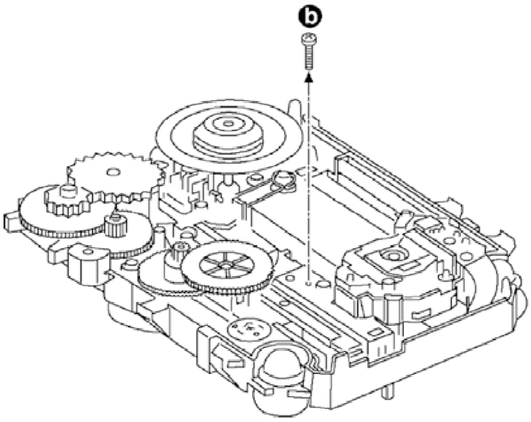

FFC
Short Pin

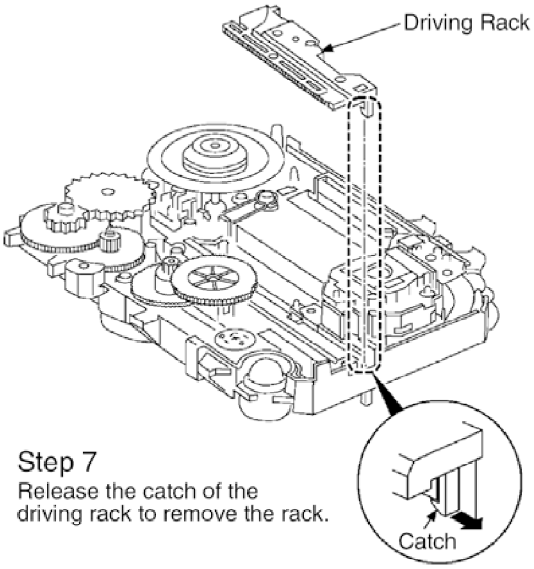
### Step 5

Turn the traverse gear (B) to the arrow direction, and move the optical pickup to the most outer side.


Optical Pickup
Traverse Gear

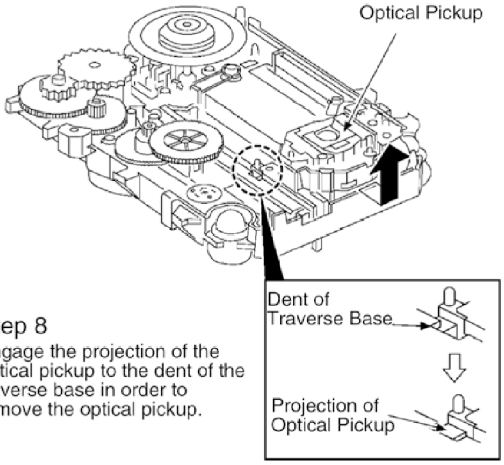
### Step 6




Driving Rack
Catch

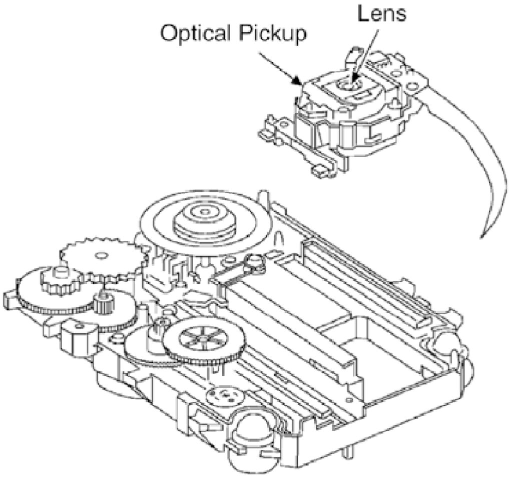
### Step 7

Release the catch of the driving rack to remove the rack.


Optical Pickup
Dent of
Traverse Base
Projection of
Optical Pickup

Step 8

Engage the projection of the optical pickup to the dent of the traverse base in order to remove the optical pickup.


Optical Pickup
Lens

Note:

Do not touch the optical pickup lens.

## 12.9. Procedures for Replacement Traverse Gear A and Traverse Gear B (CD Mechanism Unit)

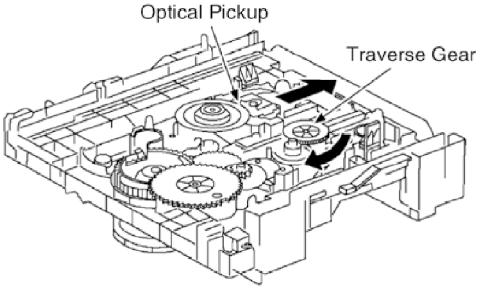
**Follow (step 1) to (step 9) of item 12.3.1.**

**Follow (step 1) to (step 3) of item 12.3.4.**

**Follow (step 1) to (step 8) of item 12.3.5.**

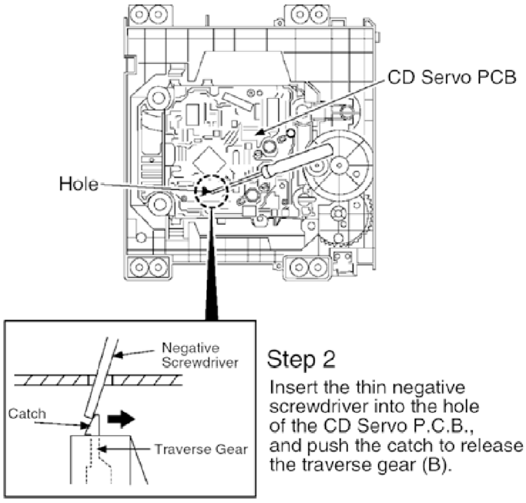
**Follow (step 1) to (step 2) of item 12.3.7.**

**Follow (step 1) to (step 2) of item 12.6.1.**


Optical Pickup
Traverse Gear

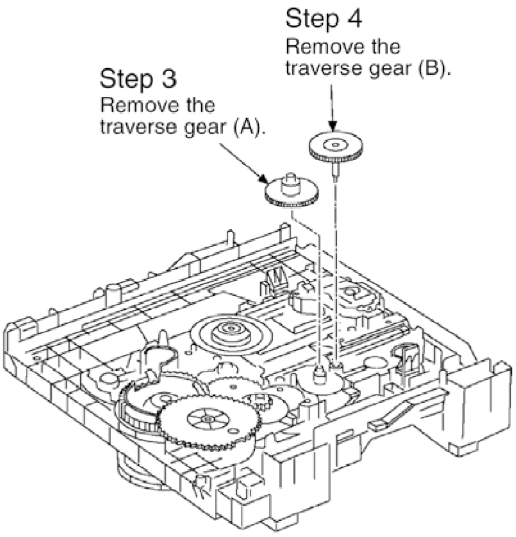
Step 1

Turn the traverse gear to the arrow direction, and move the optical pickup to the most outer side.


CD Servo PCB
Hole
Negative Screwdriver
Catch
Traverse Gear

Step 2

Insert the thin negative screwdriver into the hole of the CD Servo P.C.B., and push the catch to release the traverse gear (B).



Step 4

Remove the traverse gear (B).

Step 3

Remove the traverse gear (A).

Note:

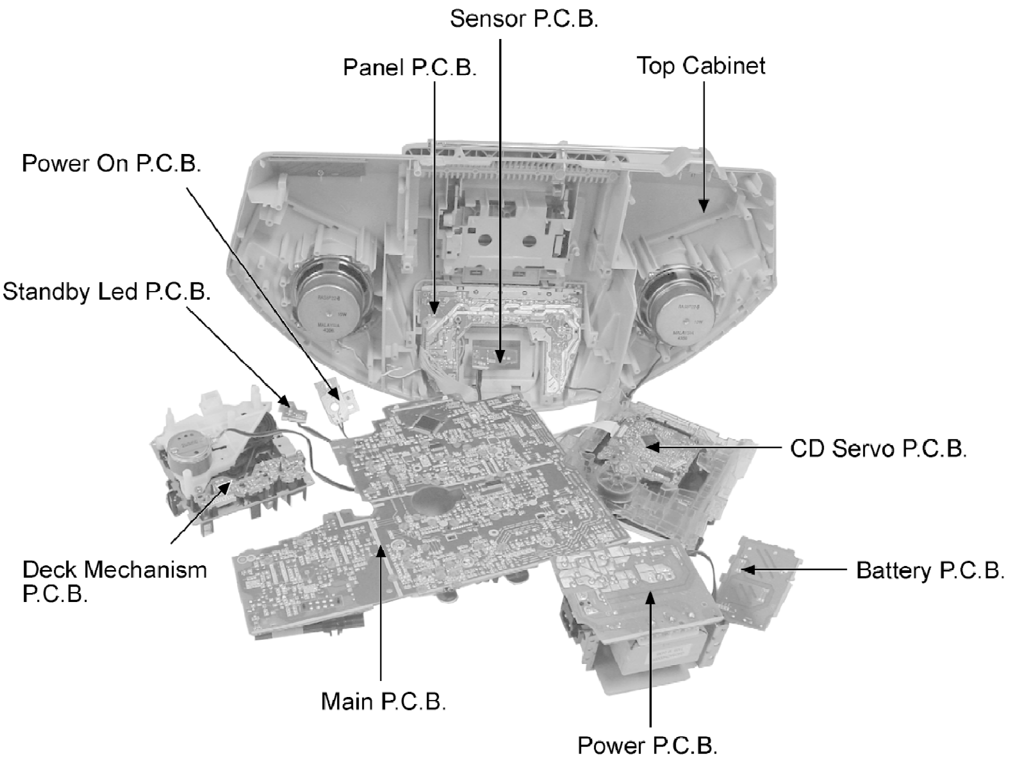
Do not use the once removed traverse gear (B), and be sure to replace with a new gear.

# 13. Procedure for checking of the major P.C.B.

## 13.1. Checking the Main P.C.B., Panel P.C.B., Deck Mechanism P.C.B., CD Servo P.C.B., Battery P.C.B., Sensor P.C.B., Power-On P.C.B., Power and Standby LED P.C.B.

**Preparation**

**Follow items 12.3.1. to 12.3.7. of Disassembly Procedure.**


Sensor P.C.B.
Panel P.C.B.
Top Cabinet
Power On P.C.B.
Standby Led P.C.B.
CD Servo P.C.B.
Deck Mechanism P.C.B.
Battery P.C.B.
Main P.C.B.
Power P.C.B.

# 14. Self Diagnostic Function

## 14.1. Self-diagnosis Function

### 14.1.1. Entering into self-diagnosis mode

**1. Ensure there is no cassette tape in the deck unit.**

**2. Switch to CD function.**

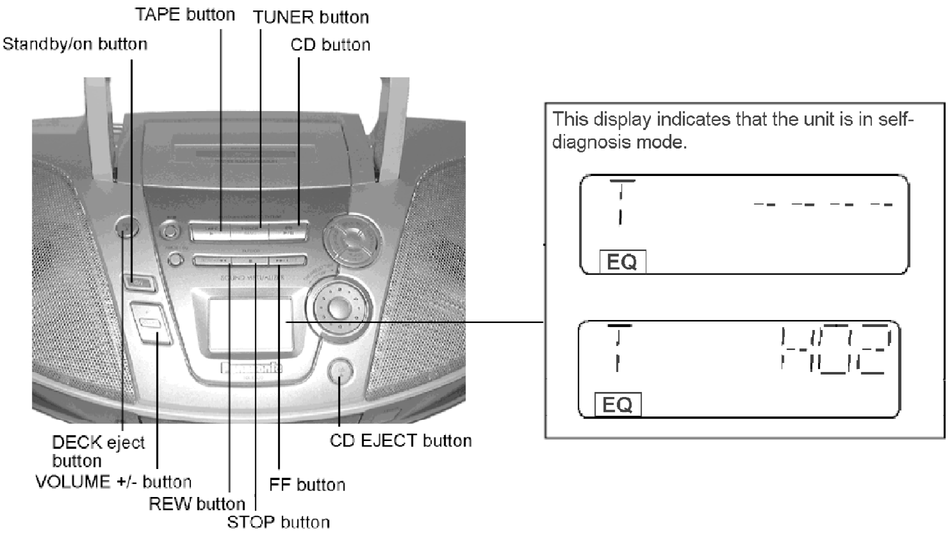
**3. Press and hold the [CD/TAPE STOP ■ ] key of the main set for more than 2 seconds. While pressing this key, press the FF key on the main set for another 2 seconds to enter into the Self-Diagnosis mode.**

**Note:**

**Even if [CD/TAPE STOP ■ ] key of the main set is pressed while the self diagnosis mode is on, function will not be switched. Instead, confirmation of error numbers will begin.**

### 14.1.2. Display Location

**Figure 14-1**


TAPE button
TUNER button
Standby/on button
CD button
This display indicates that the unit is in self-diagnosis mode.
EQ
H02
EQ
DECK eject button
VOLUME +/- button
REW button
STOP button
FF button
CD EJECT button

### 14.1.3. Error Code Display

- At the self-diagnosis mode, error codes will be displayed when [TAPE/CD STOP ■ ] key at the main unit is pressed.

**Note:**

Error numbers display is due to error symptom encountered during normal operation of unit. These error codes will be “remembered” and stored.

- Example: [T......H01] (the display shall be retained)
- To exit from the self-diagnosis mode, execute power OFF operation.
- Even at power OFF operation, this error numbers shall not be cleared (the number can be cleared only at the start up of micro-p after reset).
- If repeating self-diagnosis, add the newly detected errors only without deleting errors which have been detected before.

### 14.1.4. Error Code Table

| Error code | Possible symptom | Description of problem |
|---|---|---|
| U01 | Batteryflat | -During operation, when PDET switches to OFF (PDET - 1.534V) due to fall of power supply volt power supply will be automatically switched OFF.<br>-If REM_STBY = L, VCCDET = L the system shall be judged to have low battery and [......UO1] sh displayed for 10 seconds.<br>-To check REM_STBY and VCCDET, chattering check will be read-in twice 1 sec after PCONT is<br>-In case of power ON operation, after PCONT is set to ‘H’, power supply shall be checked using If the battery is flat (PDET - 1.534V), power supply OFF process will be executed and error numb will be displayed for 5 seconds. This error number will not be memorized. |
| U02 | Power supply cut | -During operation, when PDET switches to OFF (PDET - 1.534V) due to fall of power supply volt power supply will be automatically switched OFF.<br>-If REM_STBY = L, VCCDET = H the system shall be judged to have low battery and [......UO2] sh displayed for 10 seconds.<br>-To check REM_STBY and VCCDET, chattering check will be read-in twice 1 sec after PCONT is<br>-Power supply state shall be checked using REM_STBY and VCCDET inputs. If power ON is exe power OFF (REM_STBY = L and VCCDET = H), error number [......UO2] will be displayed for 5 se error number will not be memorized. |
| F15 | CD REST_SW abnormal | -At initial setting of CD traverse position, if REST_SW ON is not detected even though the fail s is over (10 sec), this is memorized as an error and the error number can be cleared only at the s micro-p after reset. |
| H15 | CD OPEN_SW abnormal | -During normal operation, if CD OPEN_SW ON is not detected within 4 sec, then H15 will be me memory. The error code can be cleared only at the start up of micro-p after reset. |
| H01 | DECK operation abnormal (reel motor, solenoid, and MODE_SW) (provisional) | -During normal operation, if mechanism error process is executed once by mode switch agains deck operation, it is judged as mechanism abnormality and this is memorized as an error.<br>-Conditions for judging mechanism error:<br>-Mode switch ON is not detected 800 ms after plunger activation for PLAY / REC process.<br>-Mode switch ON is not detected 800 ms after plunger activation for FF / REW process / Mode is not detected 800 ms after plunger activation after detecting Mode SW ON / Mode Switch ON detected 800 ms after detecting Mode switch OFF.<br>-If Mode switch comes ON at STOP / PAUSE state (normal condition), this is judged as an Err<br>1. Main purpose for this Self Diagnosis is to diagnose a partial short of the deck.<br>2. Mechanical error process caused by EJECT operation will not be counted.<br>3. This error number can be cleared only at the start up of micro-p after reset. |
| F26 | Communication between CD servo LSI and microp abnormal | -At the time of switching to CD function, SENSE = H will be detected using DTMS system settin If the error is memorized when SENSE = L is not detected within fail safe timer time (20 sec), [F displayed simultaneously. This display will be retained if the power is ON and at CD function. If occurs, CD operation afterward cannot be executed as in the case of [NO.DISC.]. This error nun cleared only at the start up of micro-p after reset. |

## 14.1.5. Self-diagnosis mode Deck Mechanism

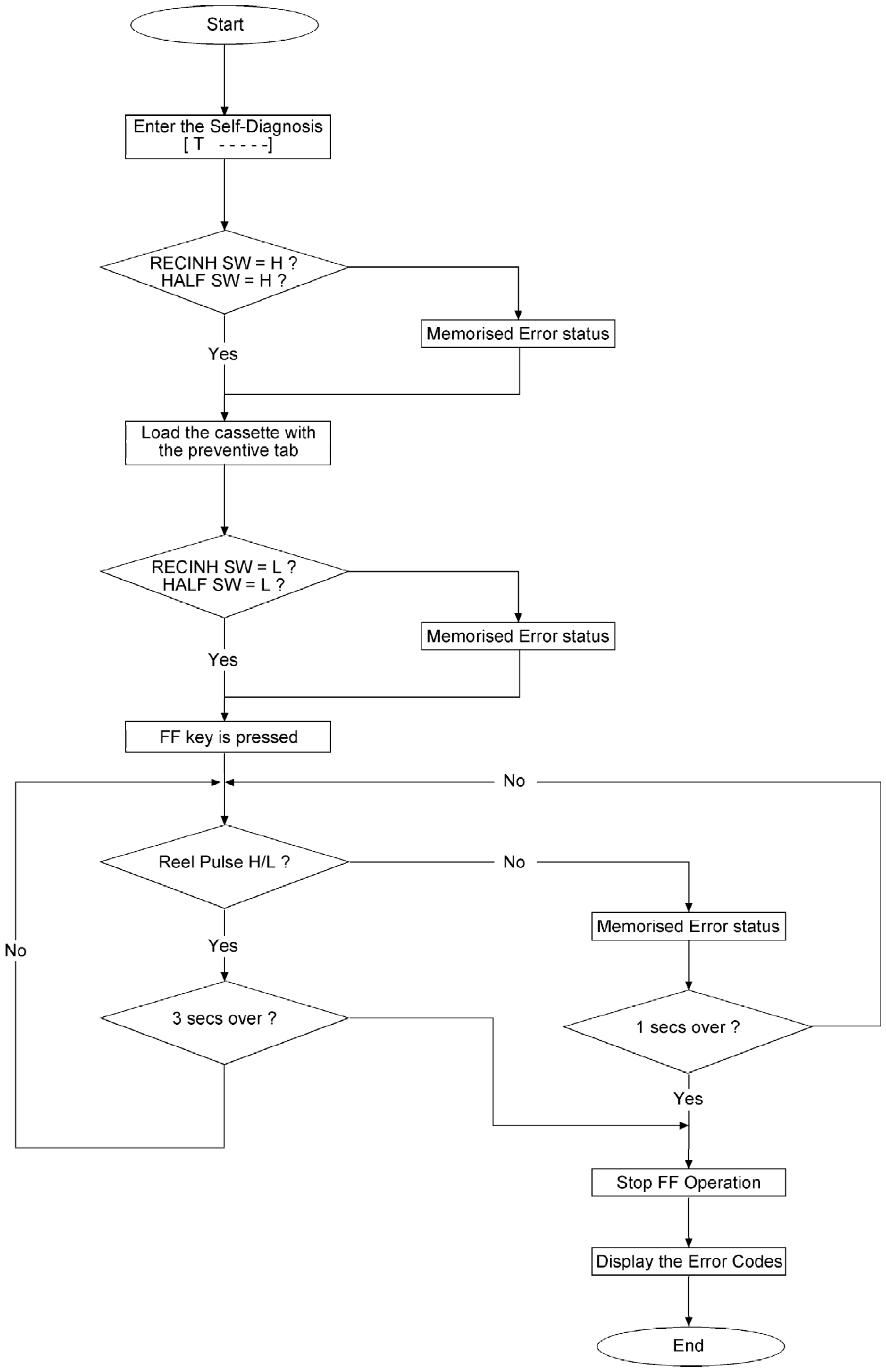
**- Activate the Self Diagnosis mode for the Deck and the following Self Diagnosis will be conducted.**

| Error Code | Description |
|---|---|
| H01: | If MODE_SW abnormal is detected during normal operation, it will be memorized. The detection and memory shall be done for Deck. |
| H02: | RECINH_SW abnormal. |
| H03: | HALF_SW abnormal. |
| F01: | Reel pulse abnormal. |

**- Operating Procedures**

1. **Activate the Self Diagnosis mode with the Deck unloaded.**
2. **The test mode will be displayed ([T] at the 1st digit shows TEST) and detection shall be executed to check RECINH_SW, HALF_SW are in the OFF state (the tape counter display is retained).**
3. **Load a cassette tape (with recording preventive tab present) into the deck and close the cassette holder.**
4. **At this instant with the cassette loaded in, RECINH_SW, HALF_SW will be checked and confirmed at this stage by the software. Press FF key to proceed the self-diagnosis. The FF operation will stop automatically after 3 sec. If abnormal operation is detected, the tape will stop automatically after 1 sec. During the FF operation, the Reel Pulse will be checked by the software.**
5. **After the tape stops, the Error codes will be displayed by toggling the STOP ■ key. (For a more detailed explanation, refer to Figure 14-2).**

**Figure 14-2**


Start
Enter the Self-Diagnosis
[T -----]
RECINH SW = H ?
HALF SW = H ?
Memorised Error status
Yes
Load the cassette with
the preventive tab
RECINH SW = L ?
HALF SW = L ?
Memorised Error status
Yes
FF key is pressed
No
Reel Pulse H/L ?
No
Memorised Error status
No
Yes
3 secs over ?
1 secs over ?
Yes
Stop FF Operation
Display the Error Codes
End

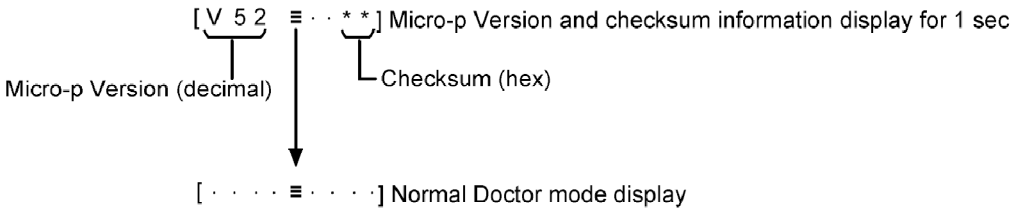
## 14.2. Setting of doctor mode

**1. Switch to CD mode. (Ensure no disc is inserted)**

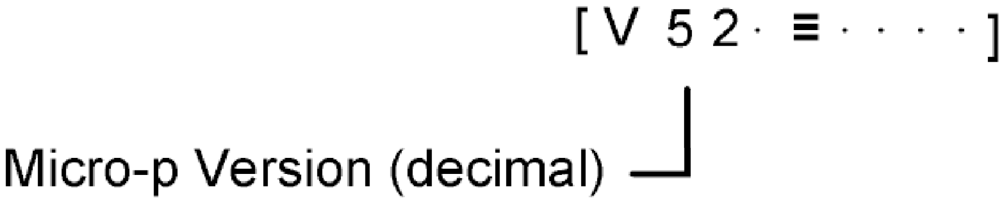
**2. To enter Doctor mode, press and hold [TAPE/CD STOP ■ ] key at**

the main unit, followed by [4] & [7] on remote control.

3. When the Doctor Mode is activated the LCD display will show the ☰ symbol at the 5th digit. At the same time, the micro-p version number (base 10) and EEPROM's checksum (base 16) will be displayed for 1 sec. After displaying the EEPROM information for 1 sec, the display will return to the normal Doctor mode display


[V 5 2 ≡ · · * *] Micro-p Version and checksum information display for 1 sec
Micro-p Version (decimal)
Checksum (hex)
[· · · · ≡ · · · ·] Normal Doctor mode display

4. However, if the EEPROM was not detected, it will not display the EEPROM's checksum information. The LCD will display micro-p version number (as shown below) for 1 sec and return to normal Doctor Mode display.


[V 5 2 · ≡ · · · · ]
Micro-p Version (decimal)

**Note:**

Within the Doctor Mode display, at any of the test modes, if [STOP ■ ] key at main set is pressed, followed by [4] and [7] key from the remote control, the micro-p's version number and EEPROM information will be displayed for 1 sec, and then returned to the normal doctor mode display.

### 14.2.1. Inspection item list

| Test number | Test Item | Operation key / (numeric buttons) |
|---|---|---|
| 1 | Tact SW inspection | CD, [1] |
| 2 | TONE inspection | [2],[3] |
| 3 | LCD ALL Segment inspection | [4] |
| 4 | CD Unit Loading Test | CD,[≥ 10],[1],[0] |
| 5 | CD Unit Traverse Test | CD,[≥ 10],[1],[1] |
| 6 | CD Unit Combination Test | CD,[≥ 10],[1],[2] |
| 7 | CD Unit Adjustment Test | [≥ 10],[2],[0] |
| 8 | SG2 Aging Test | TAPE, FF |
| 9 | EEPROM Checksum Check | DOCTOR mode key |
| 10 | BBD Check | TAPE,[8] |

**Note:**

- If entering Doctor Mode by numeric buttons, PRESET EQ will be set to OFF.
- In case of error, all the segments of LCD will blink (1 sec on and off) and Doctor Mode shall be retained.

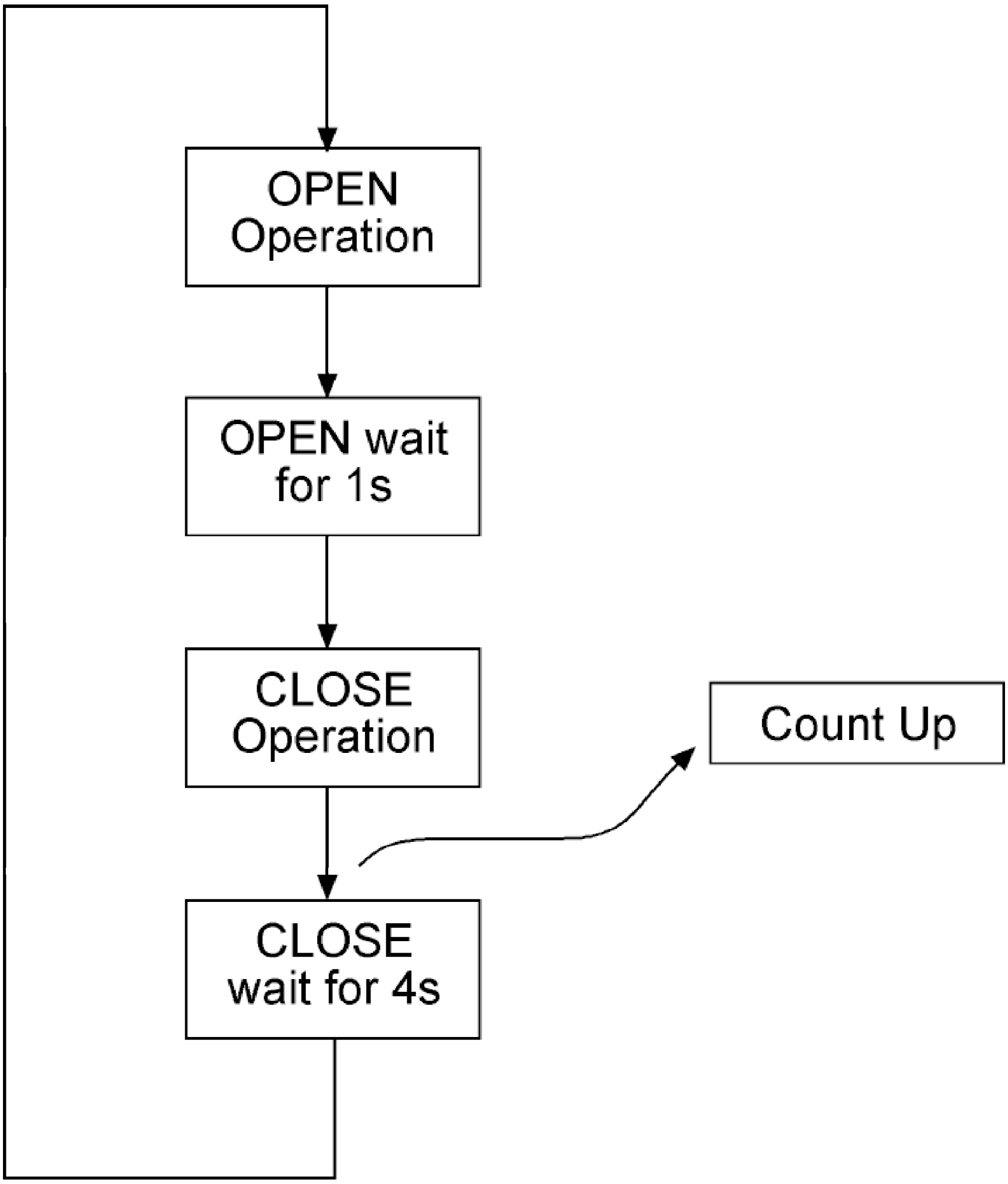
### 14.2.2. CD Unit Loading Test (Reliability test 1)

- Purpose : To test CD Unit Loading (OPEN / CLOSE aging test) function.
- The following operation will be carried out.
- Procedures :

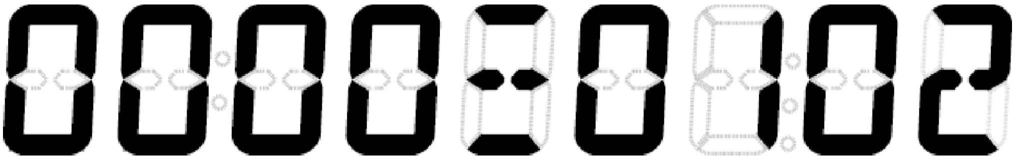
1. Enter into doctor mode (Refer to section 14.2)

2. Press [≥ 10] followed by [1] & [0] on the remote control.

Figure 14-3


OPEN Operation
OPEN wait for 1s
CLOSE Operation
Count Up
CLOSE wait for 4s

**3. After a few times, the LCD shall display as below:**



**Special Note:**

**Due to certain reasons, when the following conditions occur, the aging will stop but the count value shall be maintained:**

- **During OPEN operation, after a certain timing, the CD does not open in the Open position. (After REST SW is OFF, the CD OPEN SW did not turn ON after 4s.)**
  **— Do the CLOSE operation, stop the aging test at CLOSE**

condition.

- During CLOSE operation, after a certain timing, the CD does not close in the CLOSE position. (After CLOSE operation, REST SW was not turned off in 4s.)
  — Do the OPEN operation, stop the aging test at OPEN condition

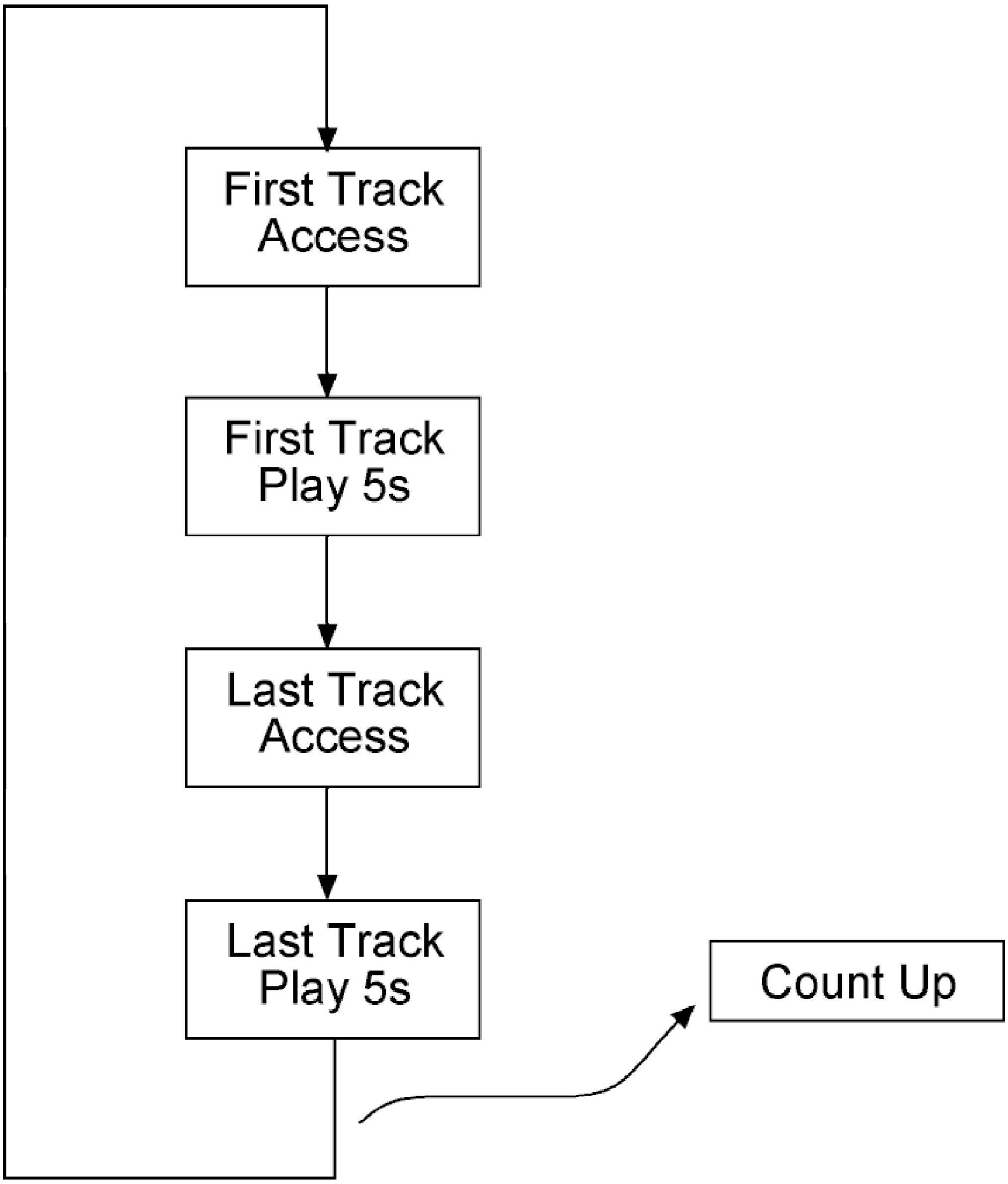
### 14.2.3. CD Unit Traverse Test (Reliability test 2)

- Purpose : (Access Inner Outer Disc aging test) To test CD Unit traverse reliability.
- The following operation will be carried out.
- Procedures :

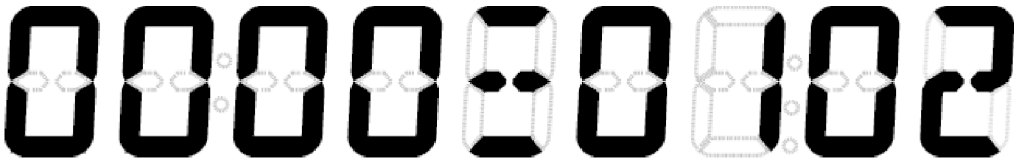
1. Enter into doctor mode (Refer to section 14.2)

2. Press [ ≥ 10] followed by [1] & [1] on the remote control.

Figure 14-4


First Track Access
First Track Play 5s
Last Track Access
Last Track Play 5s
Count Up

**3. After a few times, the LCD will display as shown below:**



**Special Note :**
**Due to certain reasons, when the following conditions occur, the aging will stop but the count value shall be maintained:**

**- After 10s, the Disc Access has not yet complete.**

**- Out of Focus for more than 2s.**

### 14.2.4. CD Unit Combination Test (Reliability test 3)

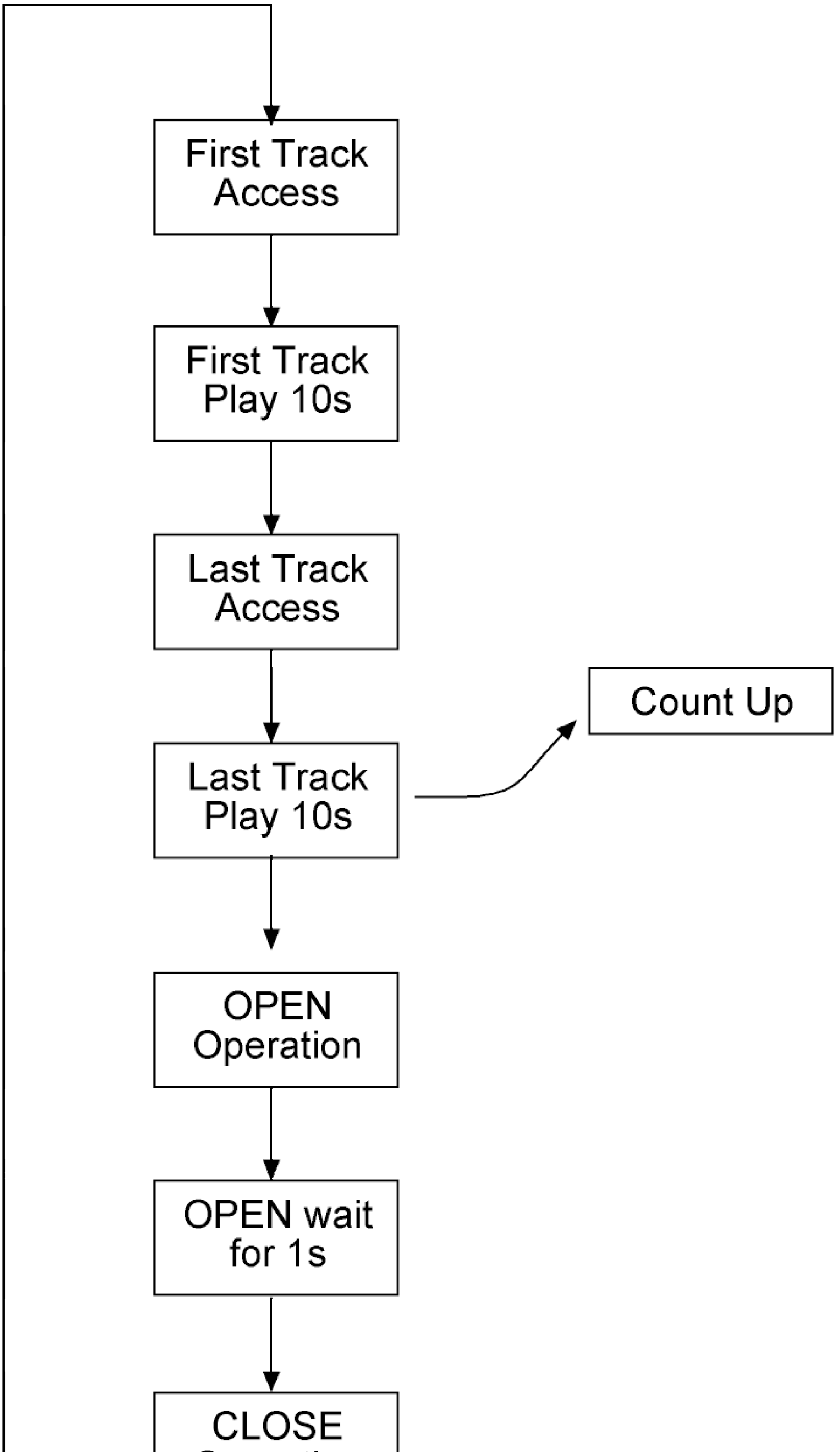
**- Purpose : This test is the combination of the CD OPEN/CLOSE**

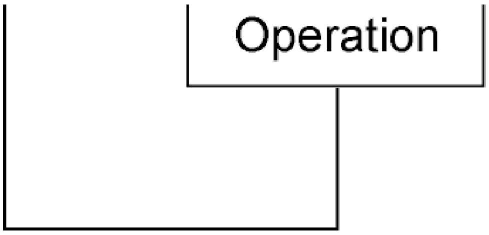
operation and the Inner and Outer Disc Access operation aging test. (Mainly used for CD unit reliability test)

- Operation : During Doctor Mode, when the keys [ ≥ 10] followed by [1] & [2] are being pressed using the remote control key, the following operation will be carried out.
- Procedures

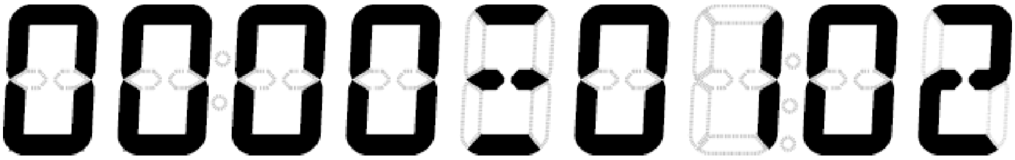
1. Enter into doctor mode (Refer to section 14.2)
2. Press [ ≥ 10] followed by [1] & [2] on the remote control key, the following operation will be carried out:

Figure 14-5


First Track Access
First Track Play 10s
Last Track Access
Last Track Play 10s
Count Up
OPEN Operation
OPEN wait for 1s
CLOSE



**3. After a few times, the LCD will display as shown below:**



**Special Note :**
**Due to certain reason, when the following conditions occur, the aging will stop but the count value shall be maintained:**

- **During OPEN operation, after a certain timing, the CD does not open in the OPEN position. (After REST SW is OFF, the CD OPEN SW did not turn ON after 4s.)**
- **During CLOSE operation, after a certain timing, the CD does not close in the CLOSE position. (After CLOSE operation, REST SW was not turned off in 4s.)**
- **After 10s, the Disc Access has not yet complete.**
- **Out of Focus for more than 2s.**

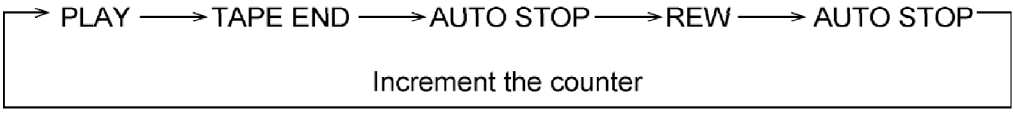
### 14.2.5. Cassette Aging Test (SG2)

- **Purpose : To check the reliability of the SG2 mechanism.**
- **Operation: After entering the doctor mode, press [▶▶| /+ /FF] key on the main set for 2sec, it will enter the Aging Test where the process is as below:**
- **Stop Operation: Use Stop key (main set). If stop key is pressed, aging test will stop and remain in doctor mode.**
- **Procedures :**

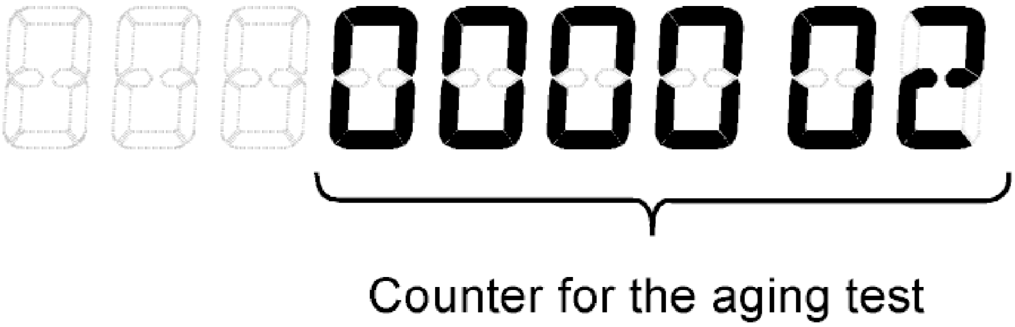
**1. Enter into doctor mode (Refer to section 14.2).**

**2. Press [▶▶| /+ /FF] on the main unit. it will enter into the casette aging mode.**

**SG2 Aging Test**



**Example of LCD Display:**



# 15. Measurements and Adjustments

## 15.1. Tuner Section

| READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT |
|---|
| 1. Set selector switch to AM or TAPE.<br>2. Set volume level to 40.<br>3. Output of signal generator should be no higher than necessary to obtain an output reading. |

### - AM-RF ALIGNMENT

| Signal Generator or Sweep Generator | | Radio Dial Setting | Indicator (Electronic Voltmeter or oscilloscope) | Adjustment / (Shown in Fig.1) | R |
|---|---|---|---|---|---|
| Connections | Frequency | | | | |
| Fashion a loop of several turns of wire and radiate signal into loop of receiver. | 594 kHz | Point of non-interference (on/about 600 kHz) | Headphone Jack (32 Ω ) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument. | [*1] L3 (AM ANT coil) | Adju max outp |
| Fashion a loop of several turns of wire and radiate signal into loop of receiver. | 1503 kHz | Point of non-interference (on/about 600 kHz) | Headphone Jack (32 Ω ) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument. | CT1 (AM ANT Trimmer) | Adju max outp |

[*1] Fix antenna coil with wax after completing alignment.

### - FM-RF ALIGNMENT

| Signal Generator or Sweep Generator | | Radio Dial Setting | Indicator (Electronic Voltmeter or oscilloscope) | Adjustment / (Shown in Fig.1) | R |
|---|---|---|---|---|---|
| Connections | Frequency | | | | |
| Fashion a loop of several turns of wire and radiate signal into loop of receiver. | 87.5 MHz | Point of non-interference (on/about 600 kHz) | Headphone Jack (32 Ω ) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument. | [*1] L4 (AM IFT) | Adju<br>max<br>outp |

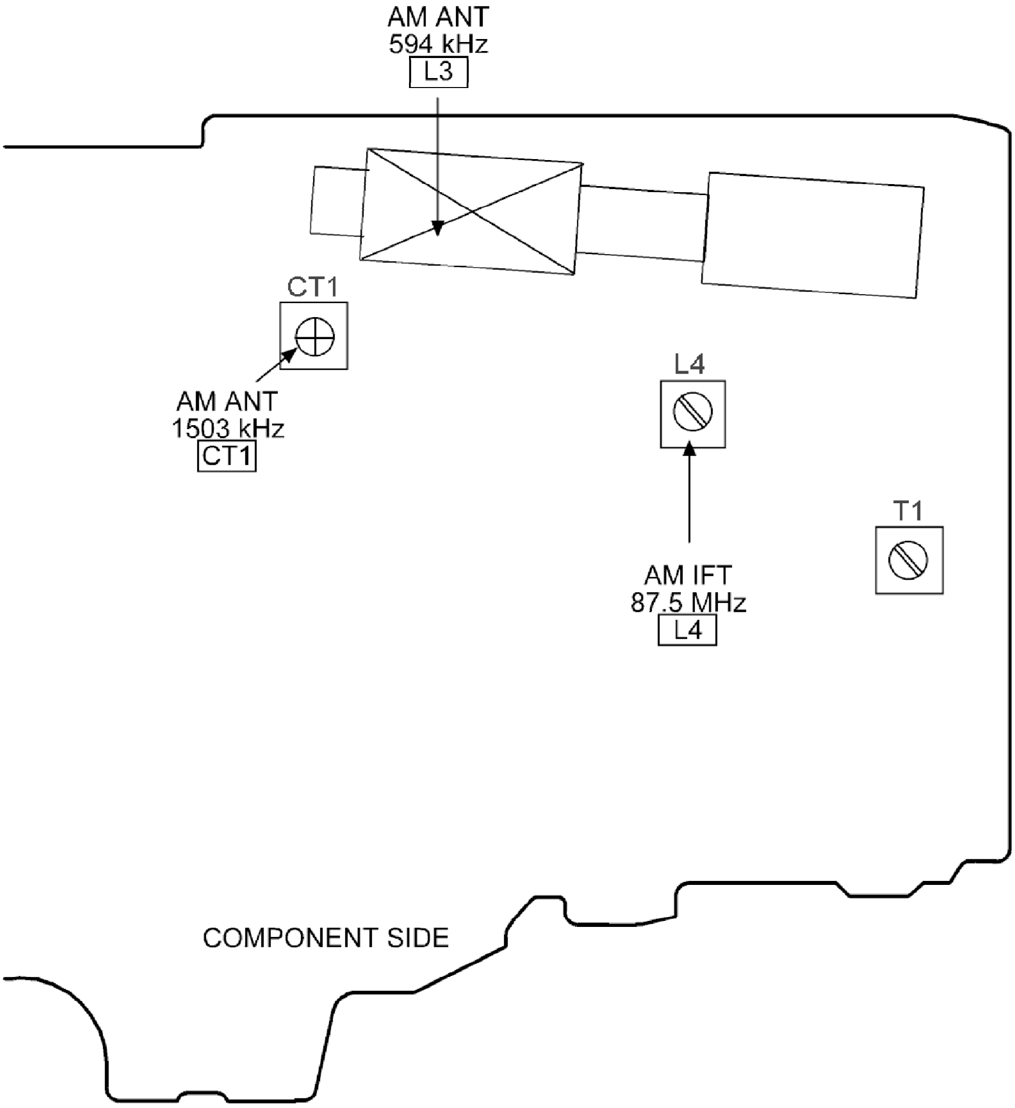

AM ANT
594 kHz
L3
CT1
AM ANT
1503 kHz
CT1
L4
AM IFT
87.5 MHz
L4
T1
COMPONENT SIDE

FIG 1.

## 15.2. Deck Section

### - HEAD AZIMUTH ALIGNMENT

| Test Tape | Indicator (Electronic Voltmeter or oscilloscope) | Adjustment | Remarks |
|---|---|---|---|
| QZZCFM (8 kHz, -20 dB) | Headphone Jack (32 Ω )Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument. | Azimuth Screw<br>(Shown in Fig. 3) | 1. Insert a test tape (QZZFCM) and start playba forward direction.<br>2. Adjust the azimuth screw for maximum wav the oscilloscope and the similar output on L a channels.<br>3. When adjusting the azimuth in the reverse d repeat the adjustment several times because slip on the forward direction side. |

CAUTION:

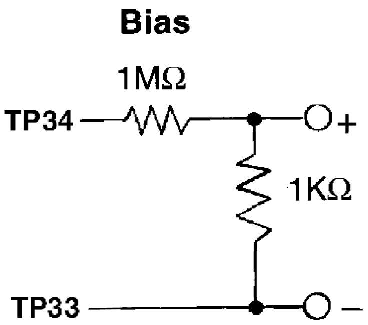
- Please remove the screw-locking bond left on the head base when replacing the azimuth screw.
- After the adjustment, apply screw lock to the azimuth adjusting screw. (Screw-locking bond: RZZ0L01)

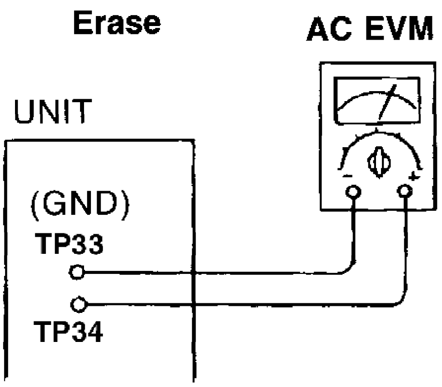
## - TAPE SPEED ALIGNMENT

| Test Tape | Equipment Connection Electronic Counter | Adjustment | Specification | Remarks |
|---|---|---|---|---|
| QZZCWAT (3 kHz, -10 dB) | Headphone Jack (32 Ω )Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument. | — | 3000 ± 90 Hz | Playmode |

## - BIAS AND ERASE VOLTAGE CHECK

1. Set the unit to “TUNER MODE” position.
2. Insert the Normal blank tape (QZZCRA) into DECK and set the unit to “REC” mode (use “ ● REC / STOP ■ ” key).
3. Measure and make sure that the output is within the standard value.
4. Insert the CrO2 tape (QZZCRX).
5. Repeat steps 2 and 3.

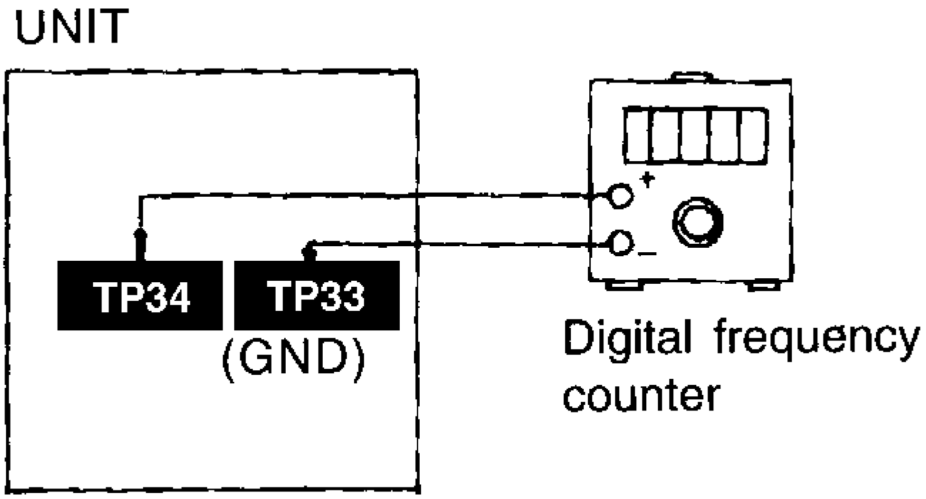

Bias
1MΩ
TP34
O+
1KΩ
TP33
O −


Erase
AC EVM
UNIT
(GND)
TP33
TP34
−
+

**Bias voltage for Deck (Standard value): 17.3 ± 1mV (Normal)**

## - BIAS FREQUENCY ADJUSTMENT

1. **Set the unit to “TUNER MODE” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK and set the unit to “REC” mode (use “ ● REC / STOP ■ ” key).**
3. **Adjust CP1301 so that the output frequency is within the standard value.**


UNIT
TP34
TP33
(GND)
+
−
Digital frequency counter

**Standard value: 100 ± 7kHz**

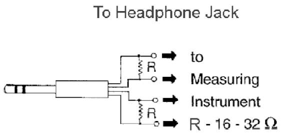

To Headphone Jack
R
R
to
Measuring
Instrument
R - 16 - 32 Ω

Fig. 2

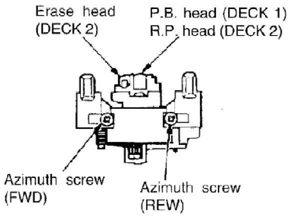

Erase head
(DECK 2)
P.B. head (DECK 1)
R.P. head (DECK 2)
Azimuth screw
(FWD)
Azimuth screw
(REW)

Fig. 3

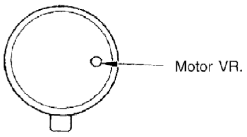


Fig. 4

# 16. Voltage Measurement

**Note:**

**- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.**
**Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.**

**- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.**

### 16.1. CD Servo P.C.B.

### 16.2. Main P.C.B.

## 17. Waveform Chart

## 18. Notes of Schematic Diagram

**(All schematic diagrams may be modified at any time with the development of new technology.)**
**Notes:**

| | |
|---|---|
| S701 : | REST SWITCH |
| S780 : | OPEN SWITCH |
| S901 : | VOL+ SWITCH |
| S902 : | VOL- SWITCH |
| S903 : | SEQ SWITCH |
| S904 : | TAPE/CD STOP SWITCH |
| S905 : | REW SWITCH |
| S906 : | FF SWITCH |
| S907 : | POWER SWITCH |
| S908 : | TUNER BAND SWITCH |
| S909 : | CD REC MODE SWITCH |
| S910 : | CD PLAY / PAUSE SWITCH |
| S911 : | DECK EJECT SWITCH |
| S912 : | TAPE SWITCH |
| S913 : | REC/PAUSE SWITCH |
| S914 : | CLOCK/TIMER SWITCH |
| S915 : | MEMORY/CLEAR SWITCH |
| S916 : | PLAY/REC SWITCH |
| S917 : | CD_OPEN/CLOSE SWITCH |

**S971 : MODE SWITCH**
**S972 : HALF SWITCH**
**S975 : RECINF SWITCH**

- **The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.**
- **Importance safety notice:**
  **Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistor), high-quality sound (capacitors), low-noise (resistor), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list. /**

**Caution !**

**IC, LSI and VLSI are sensitive to static electricity.**
**Secondary trouble can be prevented by taking care during repair.**

- **Cover the parts boxes made of plastics with aluminium foil.**
- **Put a conductive mat on the work table.**
- **Ground the soldering iron.**
- **Do not touch the pins of IC, LSI or VLSI with fingers directly.**

# 19. Schematic Diagram

## 19.1. CD SERVO CIRCUIT

## 19.2. MAIN CIRCUIT and POWER ON CIRCUIT

## 19.3. MAIN (TUNER) CIRCUIT

## 19.4. MAIN (DECK) CIRCUIT and DECK MECHANISM CIRCUIT

## 19.5. PANEL CIRCUIT, STANDBY LED CIRCUIT, BATTERY CIRCUIT, POWER CIRCUIT and SENSOR CIRCUIT

# 20. Printed Circuit Board

## 20.1. CD SERVO P.C.B.

## 20.2. MAIN P.C.B.

### 20.3. PANEL P.C.B. and DECK MECHANISM P.C.B.

### 20.4. STANDBY LED P.C.B, BATTERY P.C.B, POWER ON P.C.B and SENSOR P.C.B

### 20.5. POWER P.C.B.

# 21. Wiring Connection Diagram

# 22. Type Illustration of IC’s, Transistors and Diodes

# 23. Terminal Function Of IC’s

## 23.1. IC801 (MN101C74GAA2): Microprocessor

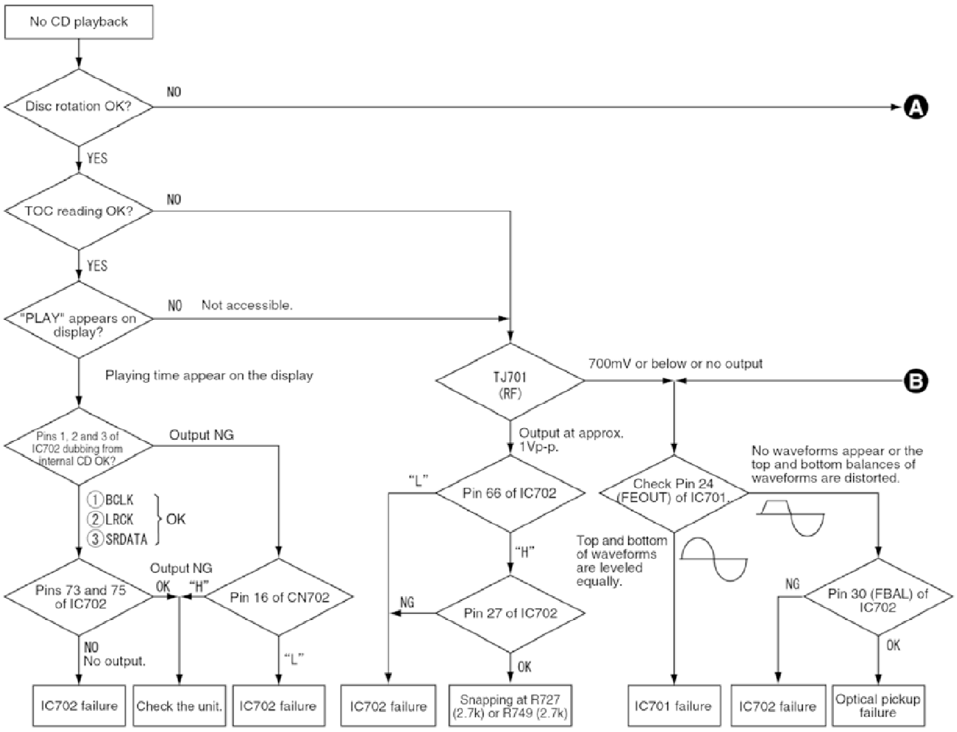
| Pin NO. | Terminal Name | I/O | Function |
|---|---|---|---|
| 1 | COM0 | O | LCD COMMON OUTPUT |
| 2 | COM1 | O | LCD COMMON OUTPUT |
| 3 | COM2 | O | LCD COMMON OUTPUT |
| 4 | COM3 | O | LCD COMMON OUTPUT |
| 5 | VLC3 | - | LCD BIAS |
| 6 | VLC2 | - | LCD BIAS |
| 7 | VLC1 | - | LCD BIAS |
| 8 | C2 | - | CONNECTED TO VLC1 |
| 9 | ECS | O | EERROM CS OUTPUT |
| 10 | ECLK | O | EEPROM CLOCK OUTPUT |
| 11 | EDATA | I/O | EEPROM DATA IN / OUT |
| 12 | MBP1 | O | MBP CONTROL OP1 |
| 13 | MBP2 | O | MBP CONTROL OP2 |
| 14 | AI_JOG1 | I | JOG INPUT 1 |
| 15 | AI_JOG2 | I | JOG INPUT 2 |
| 16 | VSS | - | GND |
| 17 | OSC2 | O | 8 MHz OSC OUTPUT |
| 18 | OSC1 | I | 8 MHz OSC OUTPUT |
| 19 | VDD | - | BUP 3.3V |
| 20 | X1 | I | 32.768kHz OSC INPUT |
| 21 | X0 | O | 32.768kHz OSC OUTPUT |
| 22 | MMOD | I | CONNECT TO VDD |
| 23 | /RESET | I | FOR RESET MICROP |
| 24 | DMOD | I | - |
| 25 | VREF+ | - | 3.3V REFERENCE VOLTAGE |
| 26 | KEY1 | I/O | kEY INPUT 1 |

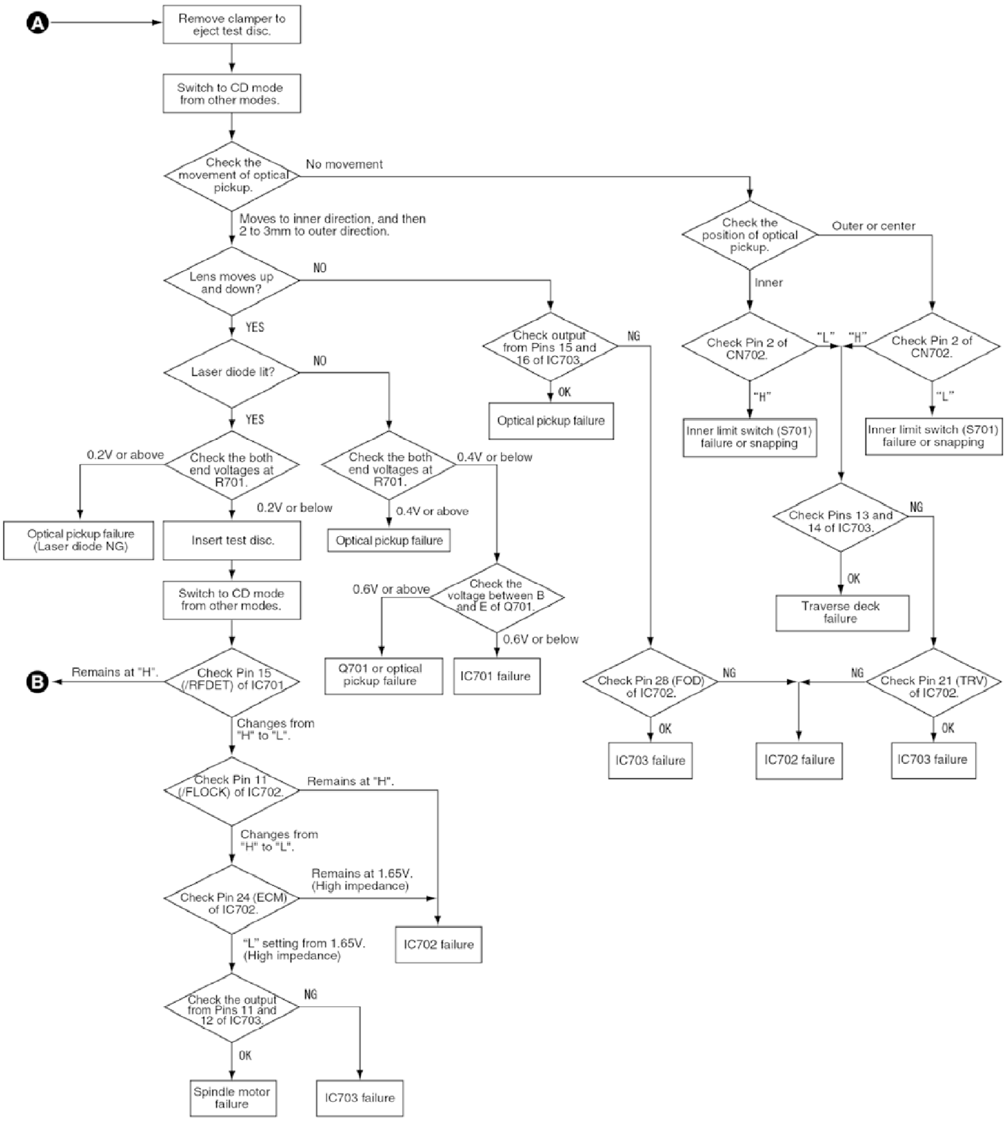
| Pin NO. | Terminal Name | I/O | Function |
|---|---|---|---|
| 27 | KEY2 | I/O | kEY INPUT 2 |
| 28 | REG | I/O | REGION SETTING |
| 29 | PDET | I | POWER DETECTION |
| 30 | MODE_SW | I | DECK INPUT 1 |
| 31 | HALF_SW | I | DECK INPUT 2 |
| 32 | RECINH_SW | I | DECK INPUT 3 |
| 33 | MOTOR_H | O | DECK MOTOR CONTROL OUTPUT |
| 34 | REC_H | O | DECK REC CONTROL OUTPUT |
| 35 | PL_H | O | DECK PLUNGER CONTROL |
| 36 | MCLK | O | CD LSI COMMAND CONTROL |
| 37 | MDATA | O | CD LSI COMMAND DATA |
| 38 | STAT | I | CD STATUS INPUT |
| 39 | MLD | O | CD LSI COMMAND LOAD |
| 40 | T_MUTE | O | TUNER MUTE |
| 41 | PLL_DO | I | PLL IF COUNT INPUT |
| 42 | PLL_DATA | O | PLL DATA OUTPUT |
| 43 | PLL_CLK | O | PLL CLOCK OUTPUT |
| 44 | PLL_CE | O | PLL CHIP ENABLE INPUT |
| 45 | BP | O | BEAT PROFF FOR AM |
| 46 | DMT_LOW | O | TAPE MUTE OUTPUT |
| 47 | PHOTO | I | DECK PHOTO SW INPUT |
| 48 | BLKCK | I | CD SUBCODE BLOCK INPUT |
| 49 | REM_IN | I | REMOTE CONTROL INPUT |
| 50 | VCCDET | I | MAIN POWER DETECT INPUT |
| 51 | MUTEA | O | AUDIO MUTE INPUT |
| 52 | OPEN_SW | I | CD OPEN SWITCH |
| 53 | NC | - | NO CONNECTION |
| 54 | CD_RESET | O | CD RST OUTPUT |
| 55 | REST_SW | I | CD LIMIT SW INPUT FOR THE MOST INNER POINT |
| 56 | CD_OPEN | O | CD OPEN OUTPUT |
| 57 | CD_CLOSE | O | CD CLOSE OUTPUT |
| 58 | NC | - | NO CONNECTION |
| 59 | ASP_CLK | O | ASP SERIAL CLOCK OUTPUT |
| 60 | ASP_DATA | O | ASP SERIAL DATA OUTPUT |
| 61 | PCONT | O | POWER CONTROL OUTPUT |

| Pin NO. | Terminal Name | I/O | Function |
|---|---|---|---|
| 62 | REM_STBY | I | AC IN DETECTION |
| 63 | NC | - | NO CONNECTION |
| 64 | NC | - | NO CONNECTION |
| 65 | NC | - | NO CONNECTION |
| 66 | NC | - | NO CONNECTION |
| 67 | NC | - | NO CONNECTION |
| 68 | NC | - | NO CONNECTION |
| 69 | NC | - | NO CONNECTION |
| 70 | NC | - | NO CONNECTION |
| 71 | NC | - | NO CONNECTION |
| 72 | SEG28 | O | LCD SEGMENT DRIVE OUTPUT |
| 73 | SEG27 | O | LCD SEGMENT DRIVE OUTPUT |
| 74 | SEG26 | O | LCD SEGMENT DRIVE OUTPUT |
| 75 | SEG25 | O | LCD SEGMENT DRIVE OUTPUT |
| 76 | SEG24 | O | LCD SEGMENT DRIVE OUTPUT |
| 77 | SEG23 | O | LCD SEGMENT DRIVE OUTPUT |
| 78 | SEG22 | O | LCD SEGMENT DRIVE OUTPUT |
| 79 | SEG21 | O | LCD SEGMENT DRIVE OUTPUT |
| 80 | SEG20 | O | LCD SEGMENT DRIVE OUTPUT |
| 81 | SEG19 | O | LCD SEGMENT DRIVE OUTPUT |
| 82 | SEG18 | O | LCD SEGMENT DRIVE OUTPUT |
| 83 | SEG17 | O | LCD SEGMENT DRIVE OUTPUT |
| 84 | SEG16 | O | LCD SEGMENT DRIVE OUTPUT |
| 85 | SEG15 | O | LCD SEGMENT DRIVE OUTPUT |
| 86 | SEG14 | O | LCD SEGMENT DRIVE OUTPUT |
| 87 | SEG13 | O | LCD SEGMENT DRIVE OUTPUT |

| Pin NO. | Terminal Name | I/O | Function |
|---|---|---|---|
| 88 | SEG12 | O | LCD SEGMENT DRIVE OUTPUT |
| 89 | SEG11 | O | LCD SEGMENT DRIVE OUTPUT |
| 90 | SEG10 | O | LCD SEGMENT DRIVE OUTPUT |
| 91 | SEG9 | O | LCD SEGMENT DRIVE OUTPUT |
| 92 | SEG8 | O | LCD SEGMENT DRIVE OUTPUT |
| 93 | SEG7 | O | LCD SEGMENT DRIVE OUTPUT |
| 94 | SEG6 | O | LCD SEGMENT DRIVE OUTPUT |
| 95 | SEG5 | O | LCD SEGMENT DRIVE OUTPUT |
| 96 | SEG4 | O | LCD SEGMENT DRIVE OUTPUT |
| 97 | SEG3 | O | LCD SEGMENT DRIVE OUTPUT |
| 98 | SEG2 | O | LCD SEGMENT DRIVE OUTPUT |
| 99 | SEG1 | O | LCD SEGMENT DRIVE OUTPUT |
| 100 | SEG0 | O | LCD SEGMENT DRIVE OUTPUT |

# 24. Troubleshooting Flowchart (CD Section Circuit)


No CD playback
Disc rotation OK?
NO
A
YES
TOC reading OK?
NO
YES
"PLAY" appears on display?
NO
Not accessible.
Playing time appear on the display
TJ701 (RF)
700mV or below or no output
B
Output at approx. 1Vp-p.
Pins 1, 2 and 3 of IC702 dubbing from internal CD OK?
Output NG
①BCLK
②LRCK
③SRDATA
OK
"L"
Pin 66 of IC702
Check Pin 24 (FEOUT) of IC701.
No waveforms appear or the top and bottom balances of waveforms are distorted.
"H"
Top and bottom of waveforms are leveled equally.
Output NG
Pins 73 and 75 of IC702
OK
"H"
Pin 16 of CN702
NG
Pin 27 of IC702
NG
Pin 30 (FBAL) of IC702
NO
No output.
"L"
OK
OK
IC702 failure
Check the unit.
IC702 failure
IC702 failure
Snapping at R727 (2.7k) or R749 (2.7k)
IC701 failure
IC702 failure
Optical pickup failure


A
Remove clamper to eject test disc.
Switch to CD mode from other modes.
Check the movement of optical pickup.
No movement
Moves to inner direction, and then 2 to 3mm to outer direction.
Lens moves up and down?
NO
YES
Laser diode lit?
NO
YES
Check the both end voltages at R701.
0.2V or above
0.2V or below
Optical pickup failure (Laser diode NG)
Insert test disc.
Switch to CD mode from other modes.
Check Pin 15 (/RFDET) of IC701.
Remains at "H".
B
Changes from "H" to "L".
Check Pin 11 (/FLOCK) of IC702.
Remains at "H".
Changes from "H" to "L".
Check Pin 24 (ECM) of IC702.
Remains at 1.65V. (High impedance)
"L" setting from 1.65V. (High impedance)
IC702 failure
Check the output from Pins 11 and 12 of IC703.
NG
OK
Spindle motor failure
IC703 failure
Check the both end voltages at R701.
0.4V or below
0.4V or above
Optical pickup failure
Check the voltage between B and E of Q701.
0.6V or above
0.6V or below
Q701 or optical pickup failure
IC701 failure
Check output from Pins 15 and 16 of IC703.
NG
OK
Optical pickup failure
Check Pin 28 (FOD) of IC702.
NG
OK
IC703 failure
Check the position of optical pickup.
Outer or center
Inner
Check Pin 2 of CN702.
"L"
"H"
Inner limit switch (S701) failure or snapping
Check Pin 2 of CN702.
"H"
"L"
Inner limit switch (S701) failure or snapping
Check Pins 13 and 14 of IC703.
NG
OK
Traverse deck failure
Check Pin 21 (TRV) of IC702.
NG
OK
IC702 failure
IC703 failure

# 25. Parts Location and Replacement Parts List

**Notes:**

**- Important safety notice:**

**Components identified by ⚠ mark have special characteristics important for safety.**

**Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.**

**When replacing any of these components, be sure to use only manufacturer’s specified parts shown in the parts list.**

**- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)**

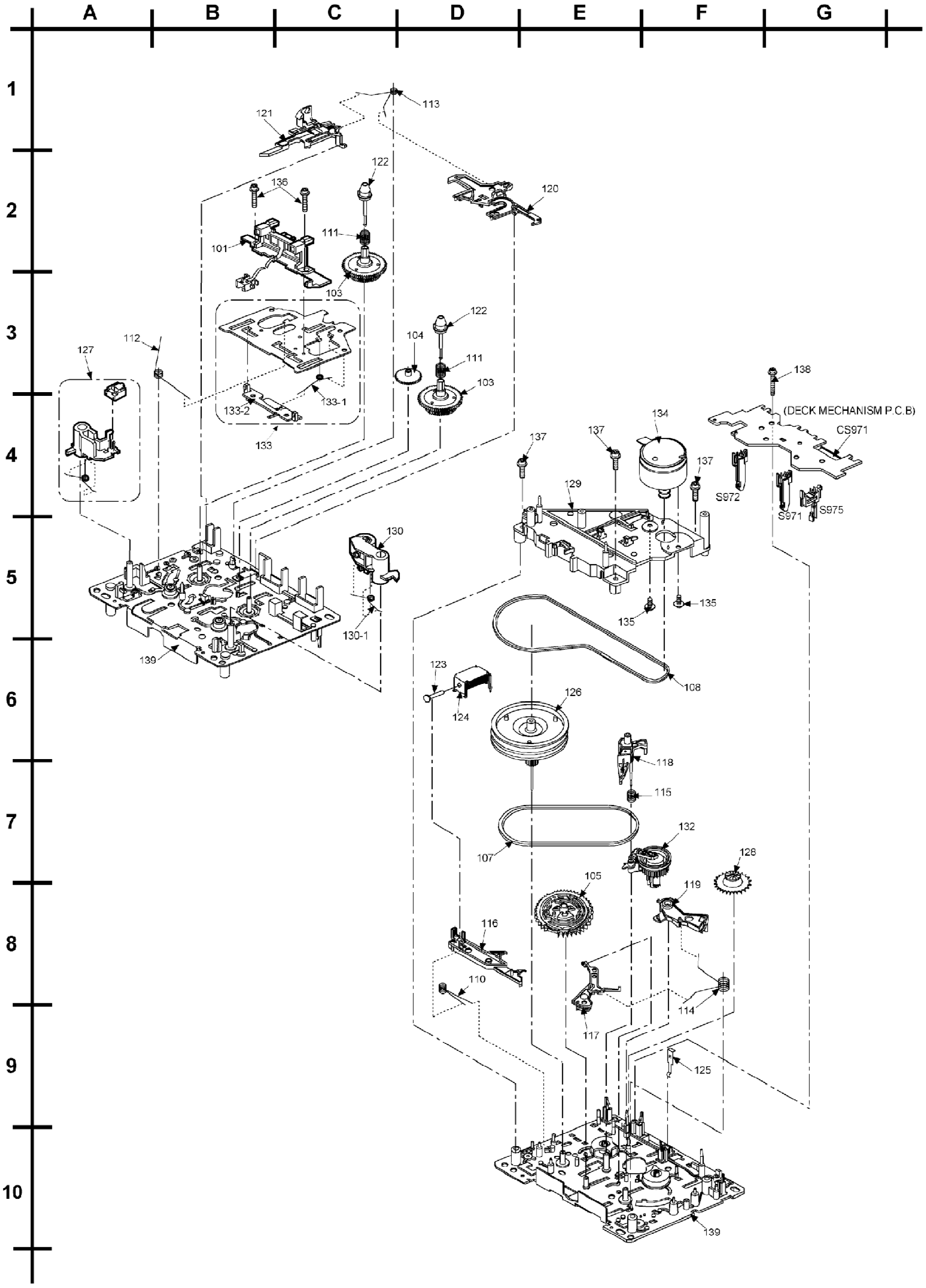
**Parts without these indications can be used for all areas.**

- **Warning: This product uses a laser diode. Refer to Precaution of Laser Diode.**
- **Capacitor values are in microfarads ( μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.**
- **Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).**
- **The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
- **[M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.**
- **Reference for O/I book languages are as follows:**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Ar:** | **Arabic** | **Du:** | **Dutch** | **It:** | **Italian** | **Sp:** | **Spanish** |
| **Cf:** | **Canadian French** | **En:** | **English** | **Ko:** | **Korean** | **Sw:** | **Swedis** |
| **Cz:** | **Czech** | **Fr:** | **French** | **Po:** | **Polish** | **Co:** | **Traditio**<br>**Chinese** |
| **Da:** | **Danish** | **Ge:** | **German** | **Ru:** | **Russian** | **Cn:** | **Simplifi**<br>**Chinese** |
| **Pe:** | **Persian** | **Ur:** | **Ukraine** | | | | |

## 25.1. Deck Mechanism (RAA4401-1V)

### 25.1.1. Deck Mechanism Parts Location

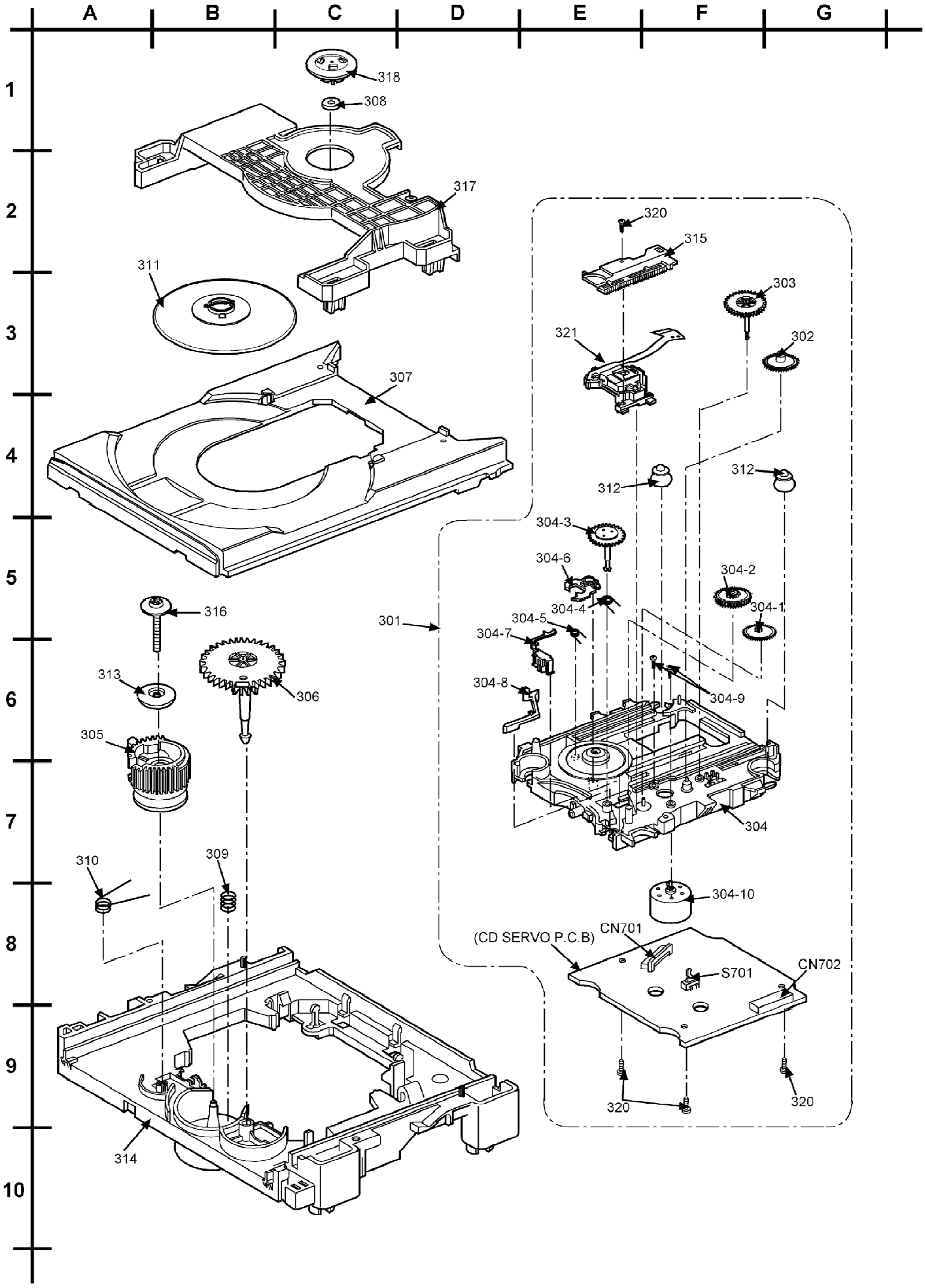

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
113
121
122
136
120
111
101
103
122
112
104
111
127
103
133-2
133-1
133
138
134
(DECK MECHANISM P.C.B)
CS971
137
137
137
129
S972
S971
S975
130
135
135
130-1
139
123
108
126
124
118
115
132
107
128
105
119
116
110
114
117
125
139

## 25.1.2. Deck Mechanism Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
|  |  | CASSETTE DECK |  |
|  |  |  |  |
| 101 | RED0062 | HEAD BLOCK UNIT | [M] |
| 103 | RDG0300 | REEL BASE GEAR | [M] |
| 104 | RDG0301 | WINDING RELAY GEAR | [M] |
| 105 | RDK0026-4 | MAIN GEAR | [M] |
| 107 | RDV0033-4 | WINDING BELT | [M] |
| 108 | RDV0064 | CAPSTAN BELT | [M] |
| 110 | RMB0312 | TRIGGER LEVER SPRING | [M] |
| 111 | RMB0400 | REEL SPRING | [M] |
| 112 | RMB0403 | HEAD PANEL SPRING | [M] |
| 113 | RMB0404 | BRAKE ROD SPRING | [M] |
| 114 | RMB0406-5 | FR LEVER SPRING | [M] |
| 115 | RMB0408 | THRUST SPRING | [M] |
| 116 | RML0370-4 | TRIGGER LEVER | [M] |
| 117 | RML0371 | FR LEVER | [M] |
| 118 | RML0372-2 | WINDING LEVER | [M] |
| 119 | RML0374-2 | EJECT LEVER | [M] |
| 120 | RMM0131-1 | BRAKE ROD | [M] |
| 121 | RMM0133-1 | EJECT ROD | [M] |
| 122 | RMQ0519 | REEL HUB | [M] |
| 123 | RMS0398-1 | MOVING CORE | [M] |
| 124 | RSJ0003 | PLUNGER ASS’Y | [M] |
| 125 | RMC0061 | PACK SPRING | [M] |
| 126 | RXF0061-1 | FLYWHEEL ‘F’ ASS’Y | [M] |
| 127 | RXL0151 | E-HEAD ARM ASS’Y | [M] |
| 128 | RXG0040 | FF RELAY GEAR ASS’Y | [M] |
| 129 | RMK0283A-J | SUB-CHASSIS | [M] |
| 130 | RXL0124 | PINCH ROLLER F ASS’Y | [M] |
| 130-1 | RMB0401 | PINCH ARM SPRING F | [M] |
| 132 | RXL0126 | WINDING ARM ASS’Y | [M] |
| 133 | RXQ0412-2 | HEAD PANEL ASS’Y | [M] |
| 133-1 | RMB0405-1 | FR ROD SPRING | [M] |
| 133-2 | RMM0132-1 | FR ROD | [M] |
| 134 | REM0120 | CAP MOTOR ASS’Y | [M] |
| 135 | RHD26022 | MOTOR SCREW | [M] |
| 136 | XTW2+5L | HEAD BLOCK UNIT SCREW | [M] |
| 137 | XTW26+10S | SUB-CHASSIS SCREW | [M] |
| 138 | XYC2+JF17 | PCB EARTH SCREW | [M] |
| 139 | RFKJSTR280PP | CHASSIS ASS’Y | [M] |

## 25.2. CD Loading Mechanism

### 25.2.1. CD Loading Mechanism Parts Location

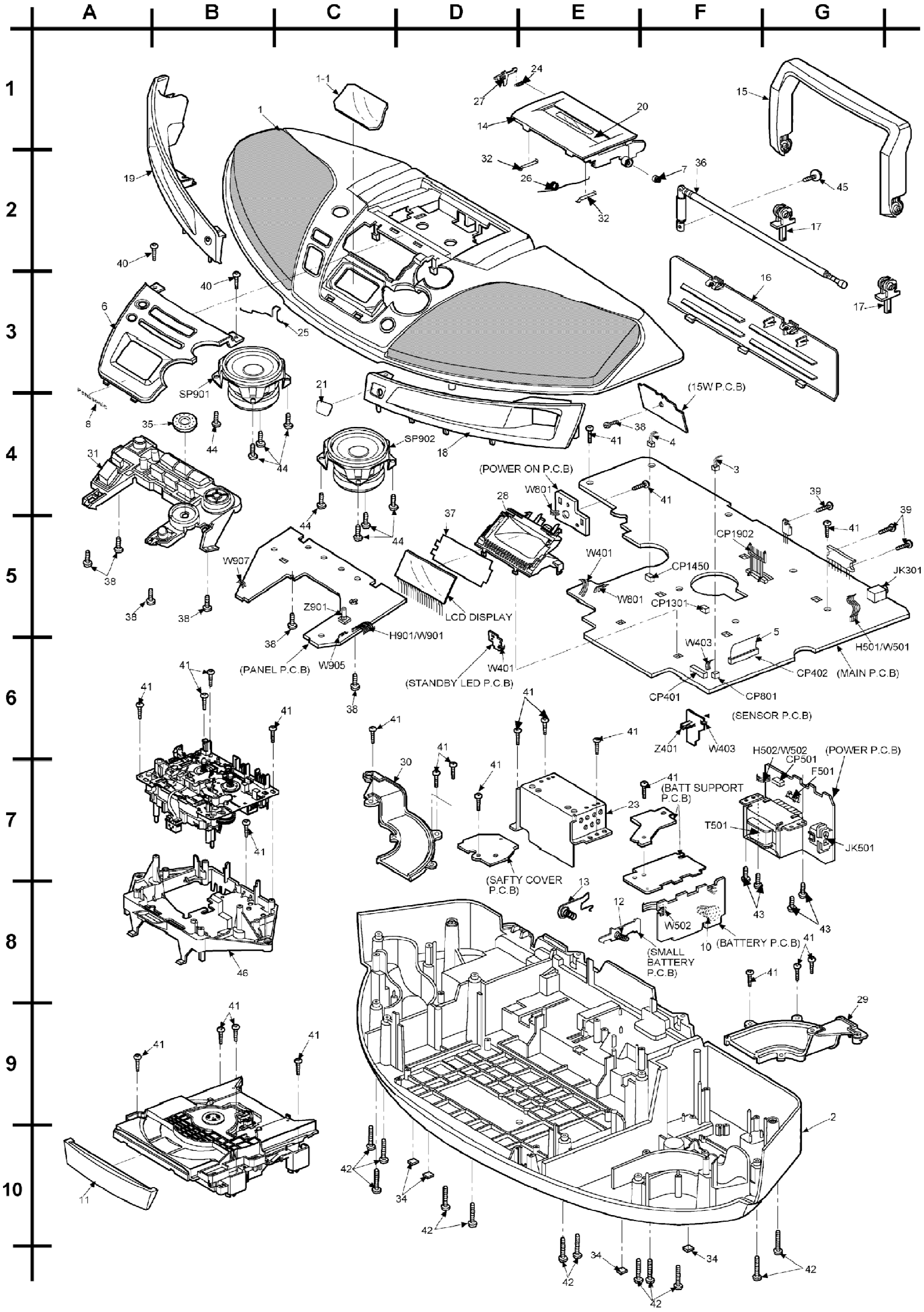

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
318
308
317
311
307
320
315
303
302
321
312
312
304-3
304-6
304-2
304-4
304-1
304-5
304-7
301
304-9
304-8
304
316
313
306
305
310
309
304-10
(CD SERVO P.C.B)
CN701
S701
CN702
320
320
320
314

## 25.2.2. CD Loading Mechanism Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | TRAVERSE DECK | |
| | | | |
| 301 | RAE0157Z-V | CT 130MP TRV | [M] |
| 302 | RDG0455 | TRAVERSE GEAR (A) | [M] |
| 303 | RDG0456 | TRAVERSE GEAR (B) | [M] |
| 304 | RFKNCT100 | TRAVERSE BASE ASS'Y | [M] |
| 304-1 | RDG0457 | LOAD GEAR (A) | [M] |
| 304-10 | RXQ0632 | TRAVERSE MOTOR UNIT | [M] |
| 304-2 | RDG0458 | LOAD GEAR (B) | [M] |
| 304-3 | RDG0459 | LOAD GEAR (C) | [M] |
| 304-4 | RME0369 | PRESS SPRING | [M] |
| 304-5 | RME0291 | LOCK SPRING | [M] |
| 304-6 | RML0551 | TRIGGER LEVER | [M] |
| 304-7 | RML0552 | LOCK LEVER | [M] |
| 304-8 | RMM0219 | STOPPER | [M] |
| 304-9 | XQN17+C28FJ | SCREW | [M] |
| 305 | RDG0460-2 | CAM GEAR | [M] |
| 306 | RDG0461 | DRIVE GEAR | [M] |
| 307 | RGQ0254-K2 | TRAY | [M] |
| 308 | RHM0001 | MAGNET | [M] |
| 309 | RMB0603 | FLOATING SPRING | [M] |
| 310 | RME0288 | CENTERING SPRING | [M] |
| 311 | RFKNXED50-S | CLAMPER HOLDER ASS'Y | [M] |
| 312 | RMG0510-K | FLOATING RUBBER (A) | [M] |
| 313 | RMG0511-K | FLOATING RUBBER (B) | [M] |
| 314 | RMK0422-6 | MECHA CHASSIS | [M] |
| 315 | RMM0218 | TRAVERSE DRIVE RACK | [M] |
| 316 | RHD30083 | CAM. GEAR SCREW | [M] |
| 317 | RMR1223-K1 | CLAMP PLATE | [M] |
| 318 | RMR1242-X1 | FIXTURE | [M] |
| 320 | XTN2+6GFJ | SCREW | [M] |
| 321 | RXQ0999 | OPU UNIT | [M] |

## 25.3. Cabinet Part List

### 25.3.1. Cabinet Parts Location


A
B
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27
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36
26
45
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32
17
40
16
40
6
25
17
SP901
21
(15W P.C.B)
8
35
44
SP902
41
38
4
18
3
31
44
(POWER ON P.C.B)
W801
39
28
41
37
39
44
41
44
CP1902
W401
38
W907
CP1450
JK301
W801
CP1301
38
Z901
LCD DISPLAY
38
H901/W901
5
H501/W501
38
W403
41
(PANEL P.C.B)
W905
W401
CP402
(MAIN P.C.B)
(STANDBY LED P.C.B)
41
CP401
CP801
38
(SENSOR P.C.B)
41
41
41
41
Z401
W403
H502/W502
(POWER P.C.B)
41
CP501
30
41
F501
41
(BATT SUPPORT P.C.B)
23
T501
41
JK501
(SAFTY COVER P.C.B)
13
43
12
W502
43
(SMALL BATTERY P.C.B)
10
(BATTERY P.C.B)
41
41
46
29
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41
2
42
11
34
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42
42

## 25.3.2. Cabinet Part List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | CABINET AND CHASSIS | |
| | | | |
| 1 | RFKKXES29EGS | UPPER CABINET ASS'Y | [M] |
| 1-1 | RKWX0140-Q | LCD PANEL | [M] |
| 2 | RFKJXES29GCS | BOTTOM CABINET ASS'Y | [M]GC |
| 2 | RFKJXES29GSS | BOTTOM CABINET ASS'Y | [M]GS |
| 2 | RFKJXES29GTS | BOTTOM CABINET ASS'Y | [M]GT |
| 3 | REX0980 | MAIN-CD WIRE | [M] |
| 4 | REXX0212 | MOTOR WIRE | [M] |
| 5 | REEV0069 | CD FF WIRE | [M] |
| 6 | RGKX0052E-H | FRONT PANEL | [M] |
| 7 | RDG0183-J | DAMPER GEAR | [M] |
| 8 | RGB0115-S | BADGE | [M] |
| 10 | RJC511XA | BATTERY TERMINAL | [M] |
| 11 | RGKX0051-1S | CD TRAY LID | [M] |
| 12 | RJC751YB | UM-3 BATTERY SPRING | [M] |
| 13 | RJC91008-1 | + - BATTERY TERMINAL | [M] |
| 14 | RKFX0080-H | CASS LID | [M] |
| 15 | RKHX0011-H | HANDLE | [M] |
| 16 | RKK0073-1H | BATTERY COVER | [M] |
| 17 | RKQ0224-W | HANDLE FIXTURE | [M] |
| 18 | RKTX0007-1S | SPEAKER PORT (R) | [M] |
| 19 | RKTX0008-1S | SPEAKER PORT (L) | [M] |
| 20 | RKWX0141-K | CASS PANEL | [M] |
| 21 | RKWX0142-Q | REMCON PANEL | [M] |
| 23 | RMAV0025A-1 | TRANS BRACKET | [M]GC GS |
| 23 | RMAV0025 | TRANS BRACKET | [M]GT |
| 24 | RMB0448-J | LOCK ROD SPRING | [M] |
| 25 | RME0270 | R. ANTENNA TERMINAL | [M] |
| 26 | RMEX0010 | CASS OPEN SPRING | [M] |
| 27 | RMM0163-1 | CASS LOCK ROD | [M] |
| 28 | RMNX0031-W | LCD HOLDER | [M] |
| 29 | RMVX0048 | PORT COVER RIGHT | [M] |
| 30 | RMVX0049 | PORT COVER LEFT | [M] |
| 31 | RYQX0031B-2S | CONTROL BUTTON ASS'Y | [M] |
| 32 | RUS757ZAA | CASS HALF SPRING | [M] |
| 34 | RHGV0008 | LEG CUSHION | [M] |
| 35 | RGWX0050-S | JOG KNOB | [M] |
| 36 | XEARR210C-C | ROD ANTENNA | [M] |
| 37 | RMXX0006 | LCD SPACER SHEET | [M] |
| 38 | RHD26046-L | SCREW | [M] |
| 39 | XTV3+10GFJ-M | SCREW | [M] |
| 40 | XTB3+12CFN | SCREW | [M] |
| 41 | XTV3+12GFJ-M | SCREW | [M] |
| 42 | XTV3+20GFJ-M | SCREW | [M] |
| 43 | XTV3+6FFJ | SCREW | [M]GC GS |
| 44 | XTV3+10FFJ | SCREW | [M] |
| 45 | XYN3+F12FFJ | SCREW | [M] |
| 46 | RMKX0037 | MECHA CHASSIS | [M] |

## 25.4. Electrical Part List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | Printed Circuit Board | |
| | | | |
| | REPV0039A | CD SERVO P.C.B. | [M] RTL |
| | REPV0043C | MAIN P.C.B. / STANDBY LED P.C.B. / BATTERY P.C.B. / POWER ON P.C.B. / SENSOR P.C.B. / POWER P.C.B. | [M] RTL (GC/GS) |
| | REPV0043D | MAIN P.C.B. / STANDBY LED P.C.B. / BATTERY P.C.B. / POWER ON P.C.B. / SENSOR P.C.B. / POWER P.C.B. | [M] RTL (GT) |
| | REPV0045A | PANEL P.C.B. | [M] RTL |
| | REPX0321F | DECK MECHANISM P.C.B. | [M] RTL |
| | | | |
| | | INTEGRATED CIRCUITS | |
| | | | |
| IC1 | C1BA00000395 | IC TUNER | [M] |
| IC2 | C1CA00000198 | IC PLL | [M] |
| IC201 | C1BB00000732 | IC SOUND PROCESSOR | [M] |
| IC301 | LA4663 | IC POWER | [M] |
| IC302 | C0CAADC00031 | IC 5V REGULATOR | [M] |
| IC303 | C0CAABC00007 | IC 3.3V REGULATOR | [M] |
| IC401 | C0JBAZ001229 | IC 3V-5V LEVEL SHIFTER | [M] |
| IC702 | MN6627953HB | IC SERVO PROCESSOR DIGITAL SIGNAL PROCESSOR/DIGITAL FILTER/D/A CONVERTER | [M] |
| IC703 | BA5948FPE2 | IC 4 CH DRIVE | [M] |
| IC801 | MN101C74GAA2 | IC MICRO PROCESSOR | [M] |
| IC971 | CNB13030R2AU | IC PHOTO INTERUPTOR | [M] |
| IC1301 | C1AA00000612 | IC ANALOG SWITCH | [M] |
| IC1302 | AN7317 | IC PLAYBACK/RECORD | [M] |
| | | | |
| | | TRANSISTORS | |
| | | | |
| Q1 | KTC3199GRTA | TRANSISTOR | [M] |
| Q102 | 2SC1740SLNRT | TRANSISTOR | [M] |
| Q103 | 2SC1740SLNRT | TRANSISTOR | [M] |
| Q202 | 2SC1740SLNRT | TRANSISTOR | [M] |
| Q203 | 2SC1740SLNRT | TRANSISTOR | [M] |
| Q301 | B1AAGF000008 | TRANSISTOR | [M] |
| Q302 | KRC119MTA | TRANSISTOR | [M] |
| Q303 | KTA1270YTA | TRANSISTOR | [M] |
| Q304 | KTC3199GRTA | TRANSISTOR | [M] |
| Q305 | B1ACND000003 | TRANSISTOR | [M] |
| Q306 | KRC107MTA | TRANSISTOR | [M] |
| Q307 | B1ACCF000063 | TRANSISTOR | [M] |
| Q308 | B1BCCG000021 | TRANSISTOR | [M] |
| Q309 | KTC3199GRTA | TRANSISTOR | [M] |
| Q310 | 2SA1515STPQ | TRANSISTOR | [M] |
| Q311 | KTC3199GRTA | TRANSISTOR | [M] |
| Q312 | 2SA1515STPQ | TRANSISTOR | [M] |
| Q313 | KTC3199GRTA | TRANSISTOR | [M] |
| Q314 | KTA1270YTA | TRANSISTOR | [M] |
| Q315 | KRC104MTA | TRANSISTOR | [M] |
| Q316 | KTC3199GRTA | TRANSISTOR | [M] |
| Q317 | B1AAGF000008 | TRANSISTOR | [M] |
| Q401 | KRC104MTA | TRANSISTOR | [M] |
| Q701 | B1ADCF000001 | TRANSISTOR | [M] |
| Q803 | KRC104MTA | TRANSISTOR | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| Q1000 | KRC119MTA | TRANSISTOR | [M] |
| Q1101 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1102 | KTC3199GRTA | TRANSISTOR | [M] |
| Q1103 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1104 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1201 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1202 | KTC3199GRTA | TRANSISTOR | [M] |
| Q1203 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1204 | B1DEDQ000004 | TRANSISTOR | [M] |
| Q1301 | KTC3199GRTA | TRANSISTOR | [M] |
| Q1303 | KTC3199GRTA | TRANSISTOR | [M] |
| Q1400 | KRC102MTA | TRANSISTOR | [M] |
| Q1401 | KRA119MTA | TRANSISTOR | [M] |
| Q1402 | KRC119MTA | TRANSISTOR | [M] |
| Q1403 | KRC119MTA | TRANSISTOR | [M] |
| Q1404 | KRC119MTA | TRANSISTOR | [M] |
| Q1451 | KRA119MTA | TRANSISTOR | [M] |
| Q1452 | 2SD09650RA | TRANSISTOR | [M] |
| Q1453 | 2SB10300RA | TRANSISTOR | [M] |
| | | | |
| | | DIODES | |
| | | | |
| D1 | KV1520NT1-2 | DIODE | [M] |
| D2 | B0CBBB000004 | DIODE | [M] |
| D3 | B0CBBB000004 | DIODE | [M] |
| D101 | B0BA7R500006 | DIODE | [M] |
| D201 | B0BA7R500006 | DIODE | [M] |
| D301 | B0BA01100004 | DIODE | [M] |
| D302 | B0AACK000004 | DIODE | [M] |
| D303 | B0AACK000004 | DIODE | [M] |
| D307 | B0BA8R700009 | DIODE | [M] |
| D308 | B0AACK000004 | DIODE | [M] |
| D309 | B0EAKM000117 | DIODE | [M] |
| D310 | B0EAKM000117 | DIODE | [M] |
| D311 | B0AACK000004 | DIODE | [M] |
| D312 | B0AACK000004 | DIODE | [M] |
| D313 | B0AACK000004 | DIODE | [M] |
| D314 | B0AACK000004 | DIODE | [M] |
| D315 | B0AACK000004 | DIODE | [M] |
| D316 | B0AACK000004 | DIODE | [M] |
| D318 | B0AACK000004 | DIODE | [M] |
| D319 | B0AACK000004 | DIODE | [M] |
| D401 | SLR325VRT31 | DIODE | [M] |
| D501 | B0EAMM000038 | DIODE | [M] |
| D502 | B0EAMM000038 | DIODE | [M] |
| D503 | B0EAMM000038 | DIODE | [M] |
| D504 | B0EAMM000038 | DIODE | [M] |
| D750 | MAZ80560ML | DIODE | [M] |
| D801 | B0AACK000004 | DIODE | [M] |
| D803 | B0AACK000004 | DIODE | [M] |
| D804 | B0AACK000004 | DIODE | [M] |
| D805 | LNW9A8BYBZ | DIODE | [M] |
| D971 | MA2C16500E | DIODE | [M] |
| D1500 | B0BA6R100003 | DIODE | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| | | | |
| | | SWITCHES | |
| | | | |
| S701 | RSH1A048-A | SW REST | [M] |
| S780 | K0F111E00093 | SW OPEN | [M] |
| S901 | EVQ21405RJ | SW VOL+ | [M] |
| S902 | EVQ21405RJ | SW VOL- | [M] |
| S903 | EVQ21405RJ | SW SEQ | [M] |
| S904 | EVQ21405RJ | SW TAPE/CD STOP | [M] |
| S905 | EVQ21405RJ | SW REW | [M] |
| S906 | EVQ21405RJ | SW FF | [M] |
| S907 | EVQ21405RJ | SW POWER | [M] |
| S908 | EVQ21405RJ | SW TUNER BAND | [M] |
| S909 | EVQ21405RJ | SW CD REC MODE | [M] |
| S910 | EVQ21405RJ | SW CD PLAY/PAUSE | [M] |
| S911 | EVQ21405RJ | SW DECK EJECT | [M] |
| S912 | EVQ21405RJ | SW TAPE | [M] |
| S913 | EVQ21405RJ | SW REC/PAUSE | [M] |
| S914 | EVQ21405RJ | SW CLOCK/TIMER | [M] |
| S915 | EVQ21405RJ | SW MEMORY/CLEAR | [M] |
| S916 | EVQ21405RJ | SW PLAY/REC | [M] |
| S917 | EVQ21405RJ | SW CD_OPEN/CLOSE | [M] |
| S971 | K0J1BB000017 | SW MODE | [M] |
| S972 | RSH1A019-2U | SW HALF | [M] |
| S975 | RSH1A019-2U | SW RECINF | [M] |
| | | | |
| | | SWITCHES | |
| | | | |
| SW502 | K0ZZ00000522 | SW VOLTAGE SELECTOR | [M]GC GS ⚠ |
| | | | |
| | | CONNECTORS | |
| CN701 | RJS2A8616 | 16P FPC CONNECTOR | [M] |
| CN702 | RJS2A7717 | 17P FFC CONNECTOR | [M] |
| | | | |
| CP401 | K1MP10A00003 | 10P WIRE HOLDER | [M] |
| CP402 | K1MN17A00040 | 17P FFC CONNECTOR | [M] |
| CP501 | K1KA04AA0186 | 4P CONNECTOR | [M] |
| CP801 | K1KA02AA0193 | 3P CONNECTOR | [M] |
| CP1301 | RJS1A6804-J | 4P CONNECTOR | [M] |
| CP1450 | K1KA02A00228 | MOTOR CONNECTOR | [M] |
| CP1902 | K1KA09B00058 | 9P CONNECTOR | [M] |
| CS971 | RJU071H09M1 | 9P CONNECTOR | [M] |
| | | | |
| | | TRIMMER | |
| | | | |
| CT1 | ECRLA010A53R | TRIMMER CAPACITOR | [M] |
| | | | |
| | | COILS & TRANSFORMERS | |
| | | | |
| L2 | G0ZZ00001604 | FM COIL | [M] |
| L3 | G2CAEB000004 | FERRITE ANTENNA | [M] |
| L4 | G2AYYYA00004 | OSC COIL | [M] |
| L6 | RL02B131-T | AM OSC COIL | [M] |
| L7 | G0C101KA0029 | AXIAL COIL | [M] |

|  |  |  |  |
|---|---|---|---|
| [illegible] | [illegible] | AXIAL COIL | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| L8 | G0ZZ00001604 | FM COIL | [M] |
| L400 | G0A200D00002 | RF CHOKE COIL | [M] ⚠ |
| L402 | G0C2R2KA0029 | COIL | [M] |
| L801 | G0C2R2KA0029 | COIL | [M] |
| L1301 | RL09B17-T | REC BIAS OSC COIL | [M] |
| | | | |
| T1 | RLI2B015-T | AM IFT | [M] |
| T501 | G4C6ACC00002 | TRANSFORMER | [M]GT ⚠ |
| T501 | G4C6ACK00008 | TRANSFORMER | [M]GC GS ⚠ |
| | | | |
| | | COMPONENT COMBINATION | |
| | | | |
| Z401 | B3RAB0000046 | REMOCON SENSOR | [M] |
| Z801 | L5ACAGD00019 | LCD DISPLAY | [M] |
| Z901 | RRVRE012102V | AI JOG | [M] |
| | | | |
| | | SPEAKERS | |
| | | | |
| SP901 | L0AA07A00014 | SPEAKER | [M] |
| SP902 | L0AA07A00014 | SPEAKER | [M] |
| | | | |
| | | CERAMIC FILTERS | |
| | | | |
| CF1 | J0B1075AA009 | CERAMIC FILTER | [M] |
| CF3 | J0B1075A0051 | FM DISCRIMINATOR | [M] |
| CF4 | RLFCFA450L4B | AM FILTER | [M] |
| | | | |
| | | OSCILLATORS | |
| | | | |
| X2 | RSXZ456KZ02 | CERAMIC OSCILLATOR | [M] |
| X3 | H0A720400003 | CRYSTAL OSCILLATOR | [M] |
| X701 | H0H169500013 | CRYSTAL OSCILLATOR | [M] |
| X801 | H0A327200097 | CRYSTAL OSCILLATOR | [M] |
| X802 | RSXZ8M00D01T | CERAMIC RESONATOR | [M] |
| | | | |
| | | FUSES | |
| | | | |
| F501 | K5D312BK0010 | FUSE | [M]GT ⚠ |
| F501 | K5D402BLA013 | FUSE | [M]GC GS ⚠ |
| | | | |
| | | FUSE HOLDERS | |
| | | | |
| FH501 | EYF52BCY | FUSE CLIP | [M] |
| FH502 | EYF52BCY | FUSE CLIP | [M] |
| | | | |
| | | FUSE PROTECTOR | |
| | | | |
| FP501 | K5G402A00025 | FUSE PROTECTOR | [M] ⚠ |
| | | | |
| | | HOLDERS | |
| | | | |
| H501 | K1YF04000001 | CABLE HOLDER | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| H502 | K1YF04000001 | CABLE HOLDER | [M] |
| H901 | RMR0319 | 10P CABLE HOLDER | [M] |
| | | | |
| | | JACKS | |
| | | | |
| JK301 | K2HC103B0162 | JK HEADPHONE | [M] |
| JK501 | K2AA5B000001 | JK AC INLET | [M] ⚠ |
| | | | |
| | | WIRES | |
| | | | |
| W401 | RWJ8302080KK | STANDBY-BLUE LED WIRE | [M] |
| W403 | RWJ8303110SS | R/CONTROL SENSOR | [M] |
| W501 | REXX0214 | MAIN-POWER WIRE | [M] |
| W502 | RWJ0104170SQ | POWER-BATTERY WIRE | [M] |
| W801 | RWJ8302080KK | STANDBY-BLUE LED WIRE | [M] |
| W901 | RWJ1110150XX | WIRE | [M] |
| W905 | RWJ4202205KX | MAIN-SPEAKER RIGHT | [M] |
| W907 | RWJ6902170KX | MAIN-SPEAKER LEFT | [M] |
| | | | |
| | | RESISTORS | |
| | | | |
| R2 | D0AE103JA048 | 10K 1/4W | [M] |
| R3 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R4 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R5 | D0AE221JA048 | 220 1/4W | [M] |
| R6 | D0AE104JA048 | 100K 1/4W | [M] |
| R7 | ERDS2TJ182T | 1.8K 1/4W | [M] |
| R8 | D0AE104JA048 | 100K 1/4W | [M] |
| R9 | D0AE104JA048 | 100K 1/4W | [M] |
| R11 | D0AE223JA048 | 22K 1/4W | [M] |
| R12 | D0AE103JA048 | 10K 1/4W | [M] |
| R13 | D0AE474JA048 | 470K 1/4W | [M] |
| R14 | D0AE474JA048 | 470K 1/4W | [M] |
| R16 | D0AE104JA048 | 100K 1/4W | [M] |
| R17 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R20 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R21 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R22 | ERDS2TJ102T | 1K 1/4W | [M] |
| R24 | D0AE103JA048 | 10K 1/4W | [M] |
| R26 | D0AE103JA048 | 10K 1/4W | [M] |
| R27 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R28 | D0AE223JA048 | 22K 1/4W | [M] |
| R29 | D0AE103JA048 | 10K 1/4W | [M] |
| R30 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R31 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R32 | D0AE331JA048 | 330 1/4W | [M] |
| R91 | ERDS2TJ330T | 33 1/4W | [M] |
| R92 | ERDS2TJ182T | 1.8K 1/4W | [M] |
| R101 | ERD2FCVG330T | 33 1/4W | [M] |
| R102 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R103 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R104 | ERDS2TJ102T | 1K 1/4W | [M] |
| R105 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R106 | D0AE123JA048 | 12K 1/4W | [M] |

|  |  |  |  |
|---|---|---|---|
| R100 | D0AE1233A043 | 12K 1/4W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R107 | D0AE122JA048 | 1.2K 1/4W | [M] |
| R108 | ERDS2TJ102T | 1K 1/4W | [M] |
| R109 | D0AE473JA048 | 47K 1/4W | [M] |
| R110 | ERDS2TJ105T | 1M 1/4W | [M] |
| R111 | D0AE103JA048 | 10K 1/4W | [M] |
| R112 | ERDS2TJ822T | 8.2K 1/4W | [M] |
| R113 | D0AE153JA048 | 15K 1/4W | [M] |
| R114 | D0AE562JA048 | 5.6K 1/4W | [M] |
| R118 | D0AE123JA048 | 12K 1/4W | [M] |
| R119 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R120 | ERDS2TJ102T | 1K 1/4W | [M] |
| R121 | ERDS2TJ181T | 180 1/4W | [M] |
| R122 | ERD2FCVJ4R7T | 4.7 1/4W | [M] |
| R123 | ERDS2TJ471T | 470 1/4W | [M] |
| R124 | ERDS2TJ683T | 68K 1/4W | [M] |
| R125 | ERDS2TJ682T | 6.8K 1/4W | [M] |
| R126 | ERD2FCVJ4R7T | 4.7 1/4W | [M] |
| R130 | ERDS2TJ102T | 1K 1/4W | [M] |
| R134 | D0AE223JA048 | 22K 1/4W | [M] |
| R135 | D0AE103JA048 | 10K 1/4W | [M] |
| R202 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R203 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R204 | ERDS2TJ102T | 1K 1/4W | [M] |
| R205 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R206 | D0AE123JA048 | 12K 1/4W | [M] |
| R207 | D0AE122JA048 | 1.2K 1/4W | [M] |
| R208 | ERDS2TJ102T | 1K 1/4W | [M] |
| R209 | D0AE473JA048 | 47K 1/4W | [M] |
| R210 | ERDS2TJ105T | 1M 1/4W | [M] |
| R211 | D0AE103JA048 | 10K 1/4W | [M] |
| R212 | ERDS2TJ822T | 8.2K 1/4W | [M] |
| R213 | D0AE153JA048 | 15K 1/4W | [M] |
| R214 | D0AE562JA048 | 5.6K 1/4W | [M] |
| R218 | D0AE123JA048 | 12K 1/4W | [M] |
| R219 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R220 | ERD2FCVJ4R7T | 4.7 1/4W | [M] |
| R221 | ERDS2TJ181T | 180 1/4W | [M] |
| R223 | ERDS2TJ471T | 470 1/4W | [M] |
| R224 | ERDS2TJ683T | 68K 1/4W | [M] |
| R225 | ERDS2TJ682T | 6.8K 1/4W | [M] |
| R226 | ERD2FCVJ4R7T | 4.7 1/4W | [M] |
| R234 | D0AE223JA048 | 22K 1/4W | [M] |
| R235 | D0AE103JA048 | 10K 1/4W | [M] |
| R301 | D0AE563JA048 | 56K 1/4W | [M] |
| R302 | D0AE103JA048 | 10K 1/4W | [M] |
| R303 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R304 | ERD2FCVJ4R7T | 4.7 1/4W | [M] |
| R305 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R306 | D0AE101JA048 | 100 1/4W | [M] |
| R307 | D0AE103JA048 | 10K 1/4W | [M] |
| R308 | D0AE103JA048 | 10K 1/4W | [M] |
| R309 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R310 | ERDS2TJ102T | 1K 1/4W | [M] |
| R311 | ERDS2TJ102T | 1K 1/4W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R312 | D0AE474JA048 | 470K 1/4W | [M] |
| R313 | ERDS2TJ393T | 39K 1/4W | [M] |
| R314 | D0AE103JA048 | 10K 1/4W | [M] |
| R315 | ERDS2TJ471T | 470 1/4W | [M] |
| R316 | ERDS2TJ471T | 470 1/4W | [M] |
| R317 | ERDS2TJ471T | 470 1/4W | [M] |
| R318 | ERDS2TJ471T | 470 1/4W | [M] |
| R319 | ERDS2TJ273T | 27K 1/4W | [M] |
| R321 | D0AE103JA048 | 10K 1/4W | [M] |
| R322 | ERDS2TJ1R5T | 1.5 1/4W | [M] |
| R323 | ERDS2TJ1R5T | 1.5 1/4W | [M] |
| R324 | ERDS2TJ1R5T | 1.5 1/4W | [M] |
| R325 | ERDS2TJ471T | 470 1/4W | [M] |
| R326 | ERDS2TJ471T | 470 1/4W | [M] |
| R327 | D0AE101JA048 | 100 1/4W | [M] |
| R328 | D0AE331JA048 | 330 1/4W | [M] |
| R329 | D0AE474JA048 | 470K 1/4W | [M] |
| R330 | D0AE103JA048 | 10K 1/4W | [M] |
| R331 | D0AE331JA048 | 330 1/4W | [M] |
| R332 | D0AE331JA048 | 330 1/4W | [M] |
| R333 | ERDS2TJ183T | 18K 1/4W | [M] |
| R334 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R335 | D0AE103JA048 | 10K 1/4W | [M] |
| R336 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R337 | D0AE103JA048 | 10K 1/4W | [M] |
| R338 | ERDS2TJ102T | 1K 1/4W | [M] |
| R339 | ERDS2TJ471T | 470 1/4W | [M] |
| R340 | D0AE104JA048 | 100K 1/4W | [M] |
| R341 | ERDS2TJ683T | 68K 1/4W | [M] |
| R401 | ERDS2TJ151T | 150 1/4W | [M] |
| R402 | ERDS2TJ821T | 820 1/4W | [M] |
| R406 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R407 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R414 | D0AE101JA048 | 100 1/4W | [M] |
| R417 | D0AE101JA048 | 100 1/4W | [M] |
| R419 | D0AE101JA048 | 100 1/4W | [M] |
| R421 | D0AE101JA048 | 100 1/4W | [M] |
| R431 | D0AE101JA048 | 100 1/4W | [M] |
| R432 | D0AE101JA048 | 100 1/4W | [M] |
| R433 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R435 | D0AE101JA048 | 100 1/4W | [M] |
| R439 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R443 | D0AE103JA048 | 10K 1/4W | [M] |
| R501 | ERDS2TJ271T | 270 1/4W | [M] |
| R701 | D0GB4R7JA007 | 4.7 1/16W | [M] |
| R702 | D0GB472JA041 | 4.7K 1/16W | [M] |
| R704 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R705 | D0GB393JA041 | 39K 1/16W | [M] |
| R706 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R711 | D0GB823JA007 | 82K 1/16W | [M] |
| R712 | D0GB821JA007 | 820 1/16W | [M] |
| R714 | D0GB471JA041 | 470 1/16W | [M] |
| R715 | D0GB332JA007 | 3.3K 1/16W | [M] |
| R717 | ERJ3GEYJ102V | 1K 1/16W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R718 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R720 | D0GB105JA007 | 1M 1/16W | [M] |
| R721 | D0GB101JA007 | 100 1/16W | [M] |
| R723 | D0GB332JA007 | 3.3K 1/16W | [M] |
| R725 | D0GB331JA007 | 330 1/16W | [M] |
| R727 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R728 | ERJ3GEYJ103V | 10K 1/16W | [M] |
| R729 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R731 | D0GB223JA041 | 22K 1/16W | [M] |
| R732 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R735 | D0GB101JA007 | 100 1/16W | [M] |
| R736 | D0GB101JA007 | 100 1/16W | [M] |
| R739 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R744 | D0GB473JA041 | 47K 1/16W | [M] |
| R749 | D0GB183JA007 | 18K 1/16W | [M] |
| R753 | D0GB100JA007 | 10 1/16W | [M] |
| R754 | D0GB5R6JA007 | 5.6 1/16W | [M] |
| R760 | D0GB101JA007 | 100 1/16W | [M] |
| R764 | ERJ3GEYJ102V | 1K 1/16W | [M] |
| R766 | D0GB562JA007 | 5.6K 1/16W | [M] |
| R801 | ERDS2TJ154T | 150K 1/4W | [M] |
| R802 | D0AE104JA048 | 100K 1/4W | [M] |
| R803 | ERDS2TJ154T | 150K 1/4W | [M] |
| R804 | D0AE103JA048 | 10K 1/4W | [M] |
| R806 | ERDS2TJ102T | 1K 1/4W | [M] |
| R807 | ERDS2TJ102T | 1K 1/4W | [M] |
| R808 | ERDS2TJ102T | 1K 1/4W | [M] |
| R809 | ERDS2TJ102T | 1K 1/4W | [M] |
| R810 | D0AE104JA048 | 100K 1/4W | [M] |
| R811 | D0AE104JA048 | 100K 1/4W | [M] |
| R813 | D0AE101JA048 | 100 1/4W | [M] |
| R814 | D0AE101JA048 | 100 1/4W | [M] |
| R815 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R819 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R820 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R821 | ERDS2TJ102T | 1K 1/4W | [M] |
| R822 | D0AE473JA048 | 47K 1/4W | [M] |
| R823 | ERDS2TJ102T | 1K 1/4W | [M] |
| R824 | D0AE101JA048 | 100 1/4W | [M] |
| R825 | D0AE153JA048 | 15K 1/4W | [M] |
| R826 | D0AE153JA048 | 15K 1/4W | [M] |
| R827 | D0AE153JA048 | 15K 1/4W | [M] |
| R828 | ERDS2TJ102T | 1K 1/4W | [M] |
| R829 | ERDS2TJ102T | 1K 1/4W | [M] |
| R830 | D0AE101JA048 | 100 1/4W | [M] |
| R831 | D0AE101JA048 | 100 1/4W | [M] |
| R832 | ERDS2TJ102T | 1K 1/4W | [M] |
| R833 | ERDS2TJ102T | 1K 1/4W | [M] |
| R834 | ERDS2TJ102T | 1K 1/4W | [M] |
| R835 | ERDS2TJ102T | 1K 1/4W | [M] |
| R836 | ERDS2TJ102T | 1K 1/4W | [M] |
| R837 | D0AE473JA048 | 47K 1/4W | [M] |
| R839 | ERDS2TJ334T | 330K 1/4W | [M] |
| R840 | ERDS2TJ391T | 390 1/4W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R841 | D0AE101JA048 | 100 1/4W | [M] |
| R842 | D0AE101JA048 | 100 1/4W | [M] |
| R843 | D0AE101JA048 | 100 1/4W | [M] |
| R845 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R846 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R847 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R848 | ERDS2TJ102T | 1K 1/4W | [M] |
| R849 | ERDS2TJ102T | 1K 1/4W | [M] |
| R850 | ERDS2TJ102T | 1K 1/4W | [M] |
| R851 | ERDS2TJ102T | 1K 1/4W | [M] |
| R852 | ERDS2TJ102T | 1K 1/4W | [M] |
| R853 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R854 | ERDS2TJ102T | 1K 1/4W | [M] |
| R855 | ERDS2TJ102T | 1K 1/4W | [M] |
| R856 | D0AE474JA048 | 470K 1/4W | [M] |
| R862 | ERDS2TJ102T | 1K 1/4W | [M] |
| R863 | D0AE101JA048 | 100 1/4W | [M] |
| R864 | D0AE101JA048 | 100 1/4W | [M] |
| R901 | ERDS2TJ822T | 8.2K 1/4W | [M] |
| R902 | D0AE562JA048 | 5.6K 1/4W | [M] |
| R903 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R904 | D0AE272JA048 | 2.7K 1/4W | [M] |
| R905 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R906 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R907 | D0AE153JA048 | 15K 1/4W | [M] |
| R908 | ERDS2TJ822T | 8.2K 1/4W | [M] |
| R909 | ERDS2TJ152T | 1.5K 1/4W | [M] |
| R910 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| R911 | D0AE153JA048 | 15K 1/4W | [M] |
| R912 | D0AE272JA048 | 2.7K 1/4W | [M] |
| R913 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R914 | D0AE562JA048 | 5.6K 1/4W | [M] |
| R915 | ERDS2TJ333T | 33K 1/4W | [M] |
| R972 | ERDS2TJ821T | 820 1/4W | [M] |
| R973 | ERDS2TJ393T | 39K 1/4W | [M] |
| R1000 | D0AE103JA048 | 10K 1/4W | [M] |
| R1001 | ERDS2TJ683T | 68K 1/4W | [M] |
| R1002 | D0AE472JA048 | 4.7K 1/4W | [M] |
| R1101 | D0AE223JA048 | 22K 1/4W | [M] |
| R1102 | ERDS2TJ560T | 56 1/4W | [M] |
| R1103 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R1104 | ERDS2TJ102T | 1K 1/4W | [M] |
| R1107 | ERDS2TJ683T | 68K 1/4W | [M] |
| R1108 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R1109 | D0AE223JA048 | 22K 1/4W | [M] |
| R1110 | D0AE474JA048 | 470K 1/4W | [M] |
| R1112 | D0AE104JA048 | 100K 1/4W | [M] |
| R1201 | D0AE223JA048 | 22K 1/4W | [M] |
| R1202 | ERDS2TJ560T | 56 1/4W | [M] |
| R1203 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R1204 | ERDS2TJ102T | 1K 1/4W | [M] |
| R1207 | ERDS2TJ683T | 68K 1/4W | [M] |
| R1208 | ERDS2TJ392T | 3.9K 1/4W | [M] |
| R1209 | D0AE223JA048 | 22K 1/4W | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R1210 | D0AE474JA048 | 470K 1/4W | [M] |
| R1212 | D0AE104JA048 | 100K 1/4W | [M] |
| R1299 | ERDS2TJ333T | 33K 1/4W | [M] |
| R1304 | ERDS2TJ102T | 1K 1/4W | [M] |
| R1305 | ERDS2TJ102T | 1K 1/4W | [M] |
| R1310 | ERDS2TJ102T | 1K 1/4W | [M] |
| R1311 | D0AE563JA048 | 56K 1/4W | [M] |
| R1313 | D0AE221JA048 | 220 1/4W | [M] |
| R1314 | D0AE100JA048 | 10 1/4W | [M] |
| R1340 | D0AE223JA048 | 22K 1/4W | [M] |
| R1341 | ERDS2TJ471T | 470 1/4W | [M] |
| R1352 | D0AE104JA048 | 100K 1/4W | [M] |
| R1353 | D0AE474JA048 | 470K 1/4W | [M] |
| R1401 | ERDS2TJ823T | 82K 1/4W | [M] |
| R1404 | D0AE473JA048 | 47K 1/4W | [M] |
| R1405 | D0AE473JA048 | 47K 1/4W | [M] |
| R1406 | D0AE473JA048 | 47K 1/4W | [M] |
| R1411 | D0AE331JA048 | 330 1/4W | [M] |
| R1451 | ERDS2TJ681T | 680 1/4W | [M] |
| R1452 | ERDS2TJ332T | 3.3K 1/4W | [M] |
| R1453 | ERDS2TJ273T | 27K 1/4W | [M] |
| R1501 | D0AE101JA048 | 100 1/4W | [M] |
| R1502 | ERDS2TJ475T | 4.7M 1/4W | [M] |
| R1503 | ERDS2TJ222T | 2.2K 1/4W | [M] |
| | | | |
| | | CAPACITORS | |
| | | | |
| C1 | F1D1H470A006 | 47P 50V | [M] |
| C2 | F1D1H100A015 | 10P 50V | [M] |
| C3 | F1C1C223A023 | 0.022 16V | [M] |
| C4 | F1D1H102A012 | 1000P 50V | [M] |
| C5 | F1D1H5R6A017 | 5.6P 50V | [M] |
| C6 | F1D1H102A012 | 1000P 50V | [M] |
| C7 | F1D1H120A015 | 12P 50V | [M] |
| C8 | F1D1H102A012 | 1000P 50V | [M] |
| C9 | F1D1H102A012 | 1000P 50V | [M] |
| C10 | F1D1H100A015 | 10P 50V | [M] |
| C12 | F1D1H331A012 | 330P 50V | [M] |
| C13 | ECA1CAK100XB | 10 16V | [M] |
| C14 | F1D1H102A012 | 1000P 50V | [M] |
| C15 | F1C1C683A025 | 0.068 16V | [M] |
| C16 | F1C1C823A025 | 0.082 16V | [M] |
| C17 | F1C1C823A025 | 0.082 16V | [M] |
| C18 | F1C1C223A023 | 0.022 16V | [M] |
| C19 | F1C1C223A023 | 0.022 16V | [M] |
| C20 | ECA1HAK010XB | 1 50V | [M] |
| C21 | ECA1HAK010XB | 1 50V | [M] |
| C22 | ECA1HAK4R7XB | 4.7 50V | [M] |
| C23 | F1C1C333A024 | 0.033 16V | [M] |
| C24 | F1C1C333A024 | 0.033 16V | [M] |
| C30 | F1D1H331A012 | 330P 50V | [M] |
| C31 | F1D1C103A004 | 0.01 16V | [M] |
| C32 | F1D1H102A012 | 1000P 50V | [M] |
| C33 | F1D1H102A012 | 1000P 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C34 | F1D1H102A012 | 1000P 50V | [M] |
| C35 | ECA1CAK101XB | 100 16V | [M] |
| C36 | ECA1CAK101XB | 100 16V | [M] |
| C37 | F1D1C103A004 | 0.01 16V | [M] |
| C39 | F1D1H120A015 | 12P 50V | [M] |
| C40 | F1D1C222A010 | 2200P 16V | [M] |
| C42 | F1D1H180A015 | 18P 50V | [M] |
| C43 | F1D1H101A012 | 100P 50V | [M] |
| C44 | ECA1HAK2R2XB | 2.2 50V | [M] |
| C45 | F1D1H102A012 | 1000P 50V | [M] |
| C48 | ECA1HAK010XB | 1 50V | [M] |
| C49 | F1D1H102A012 | 1000P 50V | [M] |
| C50 | F1D1H102A012 | 1000P 50V | [M] |
| C51 | ECA1HAK010XB | 1 50V | [M] |
| C53 | F1D1H102A012 | 1000P 50V | [M] |
| C54 | F1D1H102A012 | 1000P 50V | [M] |
| C91 | ECA1CAK220XB | 22 16V | [M] |
| C92 | F1D1H331A012 | 330P 50V | [M] |
| C93 | F1D1C103A004 | 0.01 16V | [M] |
| C98 | F1D1H331A012 | 330P 50V | [M] |
| C99 | F1D1H102A012 | 1000P 50V | [M]GC GS |
| C101 | F1D1H102A012 | 1000P 50V | [M] |
| C102 | F1C1C683A025 | 0.068 16V | [M] |
| C103 | ECA1CAK100XB | 10 16V | [M] |
| C104 | ECA1CAK100XB | 10 16V | [M] |
| C105 | F1D1H101A012 | 100P 50V | [M] |
| C106 | F1D1C332A010 | 3300P 16V | [M] |
| C108 | ECA1HAK010XB | 1 50V | [M] |
| C109 | ECA1HAK010XB | 1 50V | [M] |
| C110 | ECA1HAK010XB | 1 50V | [M] |
| C111 | F1C1C223A023 | 0.022 16V | [M] |
| C112 | ECA1HAKR22XB | 0.22 50V | [M] |
| C113 | F1D1H223A012 | 0.022 50V | [M] |
| C114 | ECQV1H104JL3 | 0.1 50V | [M] |
| C118 | F1D1H102A012 | 1000P 50V | [M] |
| C119 | ECQB1H104JF3 | 0.1 50V | [M] |
| C120 | F1C1C153A023 | 0.015 16V | [M] |
| C121 | ECA1CAK100XB | 10 16V | [M] |
| C122 | ECA1HAK2R2XB | 2.2 50V | [M] |
| C123 | F1D1H471A012 | 470P 50V | [M] |
| C124 | F1E1H1030001 | 0.01 50V | [M] |
| C125 | F1E1H1030001 | 0.01 50V | [M] |
| C130 | ECA1CAK470XB | 47 16V | [M] |
| C131 | ECA1CAM331XB | 330 16V | [M] |
| C134 | F1E1H1030001 | 0.01 50V | [M] |
| C135 | ECQB1H153JF3 | 0.015 50V | [M] |
| C136 | ECQB1H104JF3 | 0.1 50V | [M] |
| C201 | F1D1H102A012 | 1000P 50V | [M] |
| C202 | F1C1C683A025 | 0.068 16V | [M] |
| C203 | ECA1CAK100XB | 10 16V | [M] |
| C204 | ECA1CAK100XB | 10 16V | [M] |
| C205 | F1D1H101A012 | 100P 50V | [M] |
| C206 | F1D1C332A010 | 3300P 16V | [M] |
| C208 | ECA1HAK010XB | 1 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C209 | ECA1HAK010XB | 1 50V | [M] |
| C210 | ECA1HAK010XB | 1 50V | [M] |
| C211 | F1C1C223A023 | 0.022 16V | [M] |
| C212 | ECA1HAKR22XB | 0.22 50V | [M] |
| C213 | F1D1H223A012 | 0.022 50V | [M] |
| C214 | ECQV1H104JL3 | 0.1 50V | [M] |
| C217 | ECA1CAK101XB | 100 16V | [M] |
| C218 | F1D1H102A012 | 1000P 50V | [M] |
| C219 | ECQB1H104JF3 | 0.1 50V | [M] |
| C220 | F1C1C153A023 | 0.015 16V | [M] |
| C221 | ECA1HAK100XB | 10 50V | [M] |
| C222 | ECA1HAK2R2XB | 2.2 50V | [M] |
| C223 | F1D1H471A012 | 470P 50V | [M] |
| C224 | F1E1H1030001 | 0.01 50V | [M] |
| C225 | F1E1H1030001 | 0.01 50V | [M] |
| C231 | ECA1CAM331XB | 330 16V | [M] |
| C232 | F1D1H221A012 | 220P 50V | [M] |
| C233 | F1D1H221A012 | 220P 50V | [M] |
| C234 | F1E1H1030001 | 0.01 50V | [M] |
| C235 | ECQB1H153JF3 | 0.015 50V | [M] |
| C236 | ECQB1H104JF3 | 0.1 50V | [M] |
| C237 | ECA1CAK101XB | 100 16V | [M] |
| C301 | ECA1EAM472XE | 4700 25V | [M] |
| C302 | ECA1EAM101XB | 100 25V | [M] |
| C303 | ECA1CAK220XB | 22 16V | [M] |
| C304 | ECA1CAK470XB | 47 16V | [M] |
| C305 | F1D1H102A012 | 1000P 50V | [M] |
| C307 | ECA1CAK101XB | 100 16V | [M] |
| C308 | F1D1H471A012 | 470P 50V | [M] |
| C309 | ECA1CAM101XB | 100 16V | [M] |
| C310 | ECA1CAK101XB | 100 16V | [M] |
| C311 | ECEA1AKN100B | 10 10V | [M] |
| C312 | F1D1H1040002 | 0.1 50V | [M] |
| C313 | ECA1EAK470XB | 47 25V | [M] |
| C314 | F1D1H1040002 | 0.1 50V | [M] |
| C315 | F1D1E103A001 | 0.01 25V | [M] |
| C316 | ECA1HAK010XB | 1 50V | [M] |
| C317 | ECA1HAK010XB | 1 50V | [M] |
| C318 | ECA1CAK470XB | 47 16V | [M] |
| C330 | F1D1H471A012 | 470P 50V | [M] |
| C331 | ECA1CAK101XB | 100 16V | [M] |
| C406 | F1D1H561A012 | 560P 50V | [M] |
| C407 | ECA1AAK470XB | 47 10V | [M] |
| C411 | F1D1H1040002 | 0.1 50V | [M] |
| C412 | F1D1H101A012 | 100P 50V | [M] |
| C413 | F1D1H102A012 | 1000P 50V | [M] |
| C414 | F1D1H102A012 | 1000P 50V | [M] |
| C416 | F1E1H1030001 | 0.01 50V | [M] |
| C418 | F1D1H221A012 | 220P 50V | [M] |
| C419 | F1D1H221A012 | 220P 50V | [M] |
| C420 | F1D1H221A012 | 220P 50V | [M] |
| C421 | F1D1H221A012 | 220P 50V | [M] |
| C422 | F1D1H221A012 | 220P 50V | [M] |
| C423 | F1D1H221A012 | 220P 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C501 | ECQV1H104JL3 | 0.1 50V | [M] |
| C502 | ECQV1H104JL3 | 0.1 50V | [M] |
| C503 | ECQV1H104JL3 | 0.1 50V | [M] |
| C504 | ECQV1H104JL3 | 0.1 50V | [M] |
| C701 | ECEA0JKA330I | 33 6.3V | [M] |
| C702 | F1H1A4740009 | 0.47 10V | [M] |
| C703 | ECEA0JKA101I | 100 6.3V | [M] |
| C704 | F1H1C104A041 | 0.1 16V | [M] |
| C705 | F1H1C104A041 | 0.1 16V | [M] |
| C706 | F1H1C104A041 | 0.1 16V | [M] |
| C707 | F1H1E223A002 | 0.022 25V | [M] |
| C710 | ECJ1VC1H471J | 470P 50V | [M] |
| C713 | F1H1C104A041 | 0.1 16V | [M] |
| C714 | ECEA0JKA101I | 100 6.3V | [M] |
| C715 | F1H1A4740009 | 0.47 10V | [M] |
| C716 | ECJ1VB1H681K | 680P 50V | [M] |
| C717 | F1H1C104A041 | 0.1 16V | [M] |
| C718 | ECJ1VB1C823K | 0.082 16V | [M] |
| C721 | ECJ1VC1H180J | 18P 50V | [M] |
| C722 | F1H1H220A230 | 22P 50V | [M] |
| C723 | ECEA0JKA221I | 220 6.3V | [M] |
| C724 | F1H1C104A041 | 0.1 16V | [M] |
| C725 | F1H1H102A219 | 1000P 50V | [M] |
| C726 | F1H1H102A219 | 1000P 50V | [M] |
| C727 | ECA1HAK010XI | 1 50V | [M] |
| C728 | ECA1HAK010XI | 1 50V | [M] |
| C729 | ECEA1CKA100I | 10 16V | [M] |
| C730 | F1H1C104A041 | 0.1 16V | [M] |
| C731 | ECA0JAK221XI | 220 6.3V | [M] |
| C733 | F1H1C104A041 | 0.1 16V | [M] |
| C734 | ECEA1AKA221I | 220 10V | [M] |
| C735 | F1H1E104A030 | 0.1 25V | [M] |
| C738 | ECJ1VB1C563K | 0.056 16V | [M] |
| C739 | F1H1E1830001 | 0.018 25V | [M] |
| C740 | F1H1C104A041 | 0.1 16V | [M] |
| C741 | F1H1H102A219 | 1000P 50V | [M] |
| C742 | F1H1E223A002 | 0.022 25V | [M] |
| C743 | F1H1E104A030 | 0.1 25V | [M] |
| C744 | F1H1E1530002 | 0.015 25V | [M] |
| C745 | F1H1E103A029 | 0.01 25V | [M] |
| C746 | F1H1C104A041 | 0.1 16V | [M] |
| C747 | F1H1H391A013 | 390P 50V | [M] |
| C749 | F1H1H392A013 | 3900P 50V | [M] |
| C752 | F1H1E1830001 | 0.018 25V | [M] |
| C753 | F1H1H471A219 | 470P 50V | [M] |
| C755 | F1H1C104A041 | 0.1 16V | [M] |
| C759 | ECEA1CKA100I | 10 16V | [M] |
| C760 | F1H1C104A041 | 0.1 16V | [M] |
| C762 | F1H1C104A041 | 0.1 16V | [M] |
| C801 | ECA1HAK010XB | 1 50V | [M] |
| C802 | F1D1H470A006 | 47P 50V | [M] |
| C803 | F1D1H101A012 | 100P 50V | [M] |
| C807 | F1D1H101A012 | 100P 50V | [M] |
| C808 | F1D1H101A012 | 100P 50V | [M] |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C809 | F1D1H101A012 | 100P 50V | [M] |
| C810 | F1D1H180A015 | 18P 50V | [M] |
| C811 | F1D1H180A015 | 18P 50V | [M] |
| C812 | F1D1H101A012 | 100P 50V | [M] |
| C813 | F1D1H101A012 | 100P 50V | [M] |
| C814 | F1D1H101A012 | 100P 50V | [M] |
| C815 | F1D1H101A012 | 100P 50V | [M] |
| C816 | F1D1H101A012 | 100P 50V | [M] |
| C817 | F1D1H820A012 | 82P 50V | [M] |
| C818 | F1D1H820A012 | 82P 50V | [M] |
| C819 | F1D1H470A006 | 47P 50V | [M] |
| C820 | ECA0JAK101XB | 100 6.3V | [M] |
| C823 | F1D1H221A012 | 220P 50V | [M] |
| C826 | ECA1HAK2R2XB | 2.2 50V | [M] |
| C831 | F1E1H1030001 | 0.01 50V | [M] |
| C850 | F1D1H102A012 | 1000P 50V | [M] |
| C851 | ECA1CAK220XB | 22 16V | [M] |
| C901 | F1D1H101A012 | 100P 50V | [M] |
| C902 | F1D1H101A012 | 100P 50V | [M] |
| C1001 | ECA1CAK470XB | 47 16V | [M] |
| C1101 | F1D1H101A012 | 100P 50V | [M] |
| C1102 | F1D1C122A010 | 1200P 16V | [M] |
| C1103 | F1D1H101A012 | 100P 50V | [M] |
| C1104 | F1C1C393A024 | 0.039 16V | [M] |
| C1105 | ECA1CAK100XB | 10 16V | [M] |
| C1106 | ECA1CAK101XB | 100 16V | [M] |
| C1107 | ECA1HAK010XB | 1 50V | [M] |
| C1108 | F1D1H821A012 | 820P 50V | [M] |
| C1109 | ECA1CAK100XB | 10 16V | [M] |
| C1110 | F1D1H821A012 | 820P 50V | [M] |
| C1201 | F1D1H101A012 | 100P 50V | [M] |
| C1202 | F1D1C122A010 | 1200P 16V | [M] |
| C1203 | F1D1H101A012 | 100P 50V | [M] |
| C1204 | F1C1C393A024 | 0.039 16V | [M] |
| C1205 | ECA1CAK100XB | 10 16V | [M] |
| C1206 | ECA1CAK101XB | 100 16V | [M] |
| C1207 | ECA1HAK010XB | 1 50V | [M] |
| C1208 | F1D1H821A012 | 820P 50V | [M] |
| C1209 | ECA1CAK100XB | 10 16V | [M] |
| C1210 | F1D1H821A012 | 820P 50V | [M] |
| C1301 | F1D1C103A004 | 0.01 16V | [M] |
| C1304 | F0A2A102A010 | 1000P 100V | [M] |
| C1305 | F0A2A151A010 | 150P 100V | [M] |
| C1306 | ECA1CAK101XB | 100 16V | [M] |
| C1307 | F1D1C822A004 | 8200P 16V | [M] |
| C1308 | F1D1C103A004 | 0.01 16V | [M] |
| C1325 | ECA1CAK101XB | 100 16V | [M] |
| C1398 | F1D1C103A004 | 0.01 16V | [M] |
| C1399 | F1D1C103A004 | 0.01 16V | [M] |
| C1451 | ECA1CAK101XB | 100 16V | [M] |
| C1500 | ECA1CAK101XB | 100 16V | [M] |
| C1501 | ECA1CAK220XB | 22 16V | [M] |
| C1502 | ECA1CAK100XB | 10 16V | [M] |
| C1503 | F1C1C473A024 | 0.047 16V | [M] |

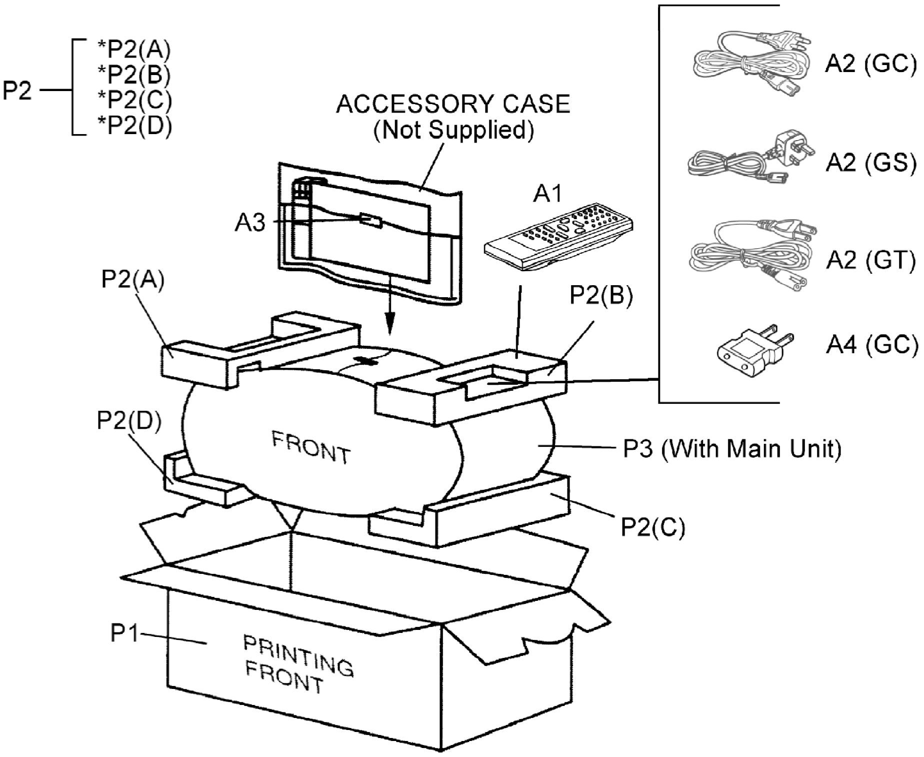
## 25.5. Packaging Materials & Accessories Parts List

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
|  |  | PACKING MATERIALS |  |
|  |  |  |  |
| P1 | RPGV0166 | PACKING CASE | [M]GC GS |
| P1 | RPGV0167 | PACKING CASE | [M]GT |
| P2 | RPNX0111-3 | POLYFOAM | [M] |
| P3 | RPHX0018 | MIRAMAT SHEET | [M] |
|  |  |  |  |
|  |  | ACCESSORIES |  |
|  |  |  |  |
| A1 | N2QAHB000048 | REMOTE CONTROL | [M] |
| A1-1 | RKK-HTR0283H | R/C BATTERY COVER | [M] |
| A2 | K2CQ2CA00002 | AC CORD | [M]GC ⚠ |
| A2 | RJA0053-3X | AC CORD | [M]GS ⚠ |
| A2 | RJA0080-L | AC CORD | [M]GT ⚠ |
| A3 | RQT7914-G | O/I BOOK (En/Cn/Ar) | [M]GC GS |
| A3 | RQT7915-M | O/I BOOK (Sp) | [M]GC GS |
| A3 | RQT7916-K | O/I BOOK (Co) | [M]GT |
| A4 | RJP1SG04-H | AC CORD ADAPTOR | [M]GC |

## 25.6. Packaging

**Accessory case**

**A3: O/I Book**


P2
*P2(A)
*P2(B)
*P2(C)
*P2(D)
ACCESSORY CASE
(Not Supplied)
A1
A3
P2(A)
P2(B)
P2(D)
FRONT
P3 (With Main Unit)
P2(C)
P1
PRINTING
FRONT
A2 (GC)
A2 (GS)
A2 (GT)
A4 (GC)

**FLE0503/P/E/J/S/M**

① **Deck**

② **Deck eject button (⏏ DECK)**
- **Press [⏏ DECK] to open the deck.**
  (The unit comes on.)
  Then, load a cassette and close the deck by hand.

③ **Record/record pause button (●/❚❚)**

④ **Cassette play button (▶TAPE)**
- **Press [▶TAPE] to start play.**

⑤ **Band button (TUNER BAND)**
- **Press [TUNER BAND] to select “FM” or “AM”.**

⑥ **CD play/pause button (CD ▶/❚❚)**
- **Press [CD ▶/❚❚] to start play.**
  Plays to the end of the CD and stops.
- **Press [CD ▶/❚❚] to pause halfway during play.**
  Press again to resume play.

⑦ **CD recording mode button (CD REC MODE)**

⑧ **Play timer/record timer button (◷PLAY/REC)**

⑨ **Clock/timer button (CLOCK/TIMER)**

⑩ **CD program/clear, tuner preset button (• MEMORY ▬ CLEAR)**

⑪ **Speaker**
**Note:**
- These speakers do not have magnetic shielding.
  Do not place them near televisions, personal computers or other devices easily influenced by magnetism.

⑫ **Standby/on switch (⏻/I)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

⑬ **Sound equalizer button (SOUND EQ)**

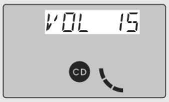
⑭ **Tuning/CD search, Rewind/fast-forward, Album skip buttons (REW/–/◀◀, ▶▶/+/FF)**

⑮ **Tape/CD mode select/stop button (■ TAPE/CD)**
- **Press [■ TAPE/CD] to stop play.**

⑯ **Time adjust, Preset channel select/CD track select dial**
**(TIME/PRESET TUNE ◄— TRACK SKIP —►)**

⑰ **Volume control buttons (+, – VOLUME)**
- **Press [+, – VOLUME] to adjust to the desired volume for CD, Tuner or Cassette.**

⑱ **Display panel**



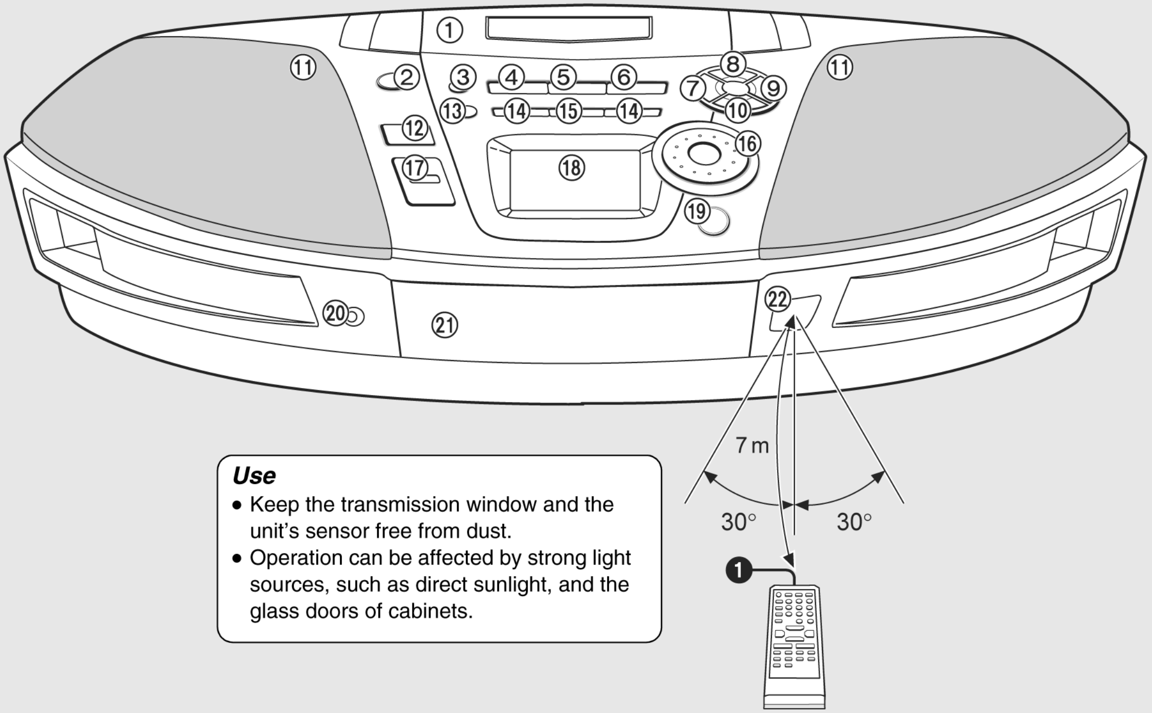
e.g. CD

⑲ **CD tray open/close button (⏏ CD)**
- **Press [⏏ CD] to open the tray.**
  (The unit comes on.)
  Load a CD and press [**⏏ CD**] to close the tray.

⑳ **Standby indicator (⏻)**
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

㉑ **CD tray**

㉒ **Remote control signal sensor (SENSOR)**



***Use***
- Keep the transmission window and the unit’s sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors of cabinets.

## *Remote Control*

❶ **Transmission window**
Aim at the sensor, avoiding obstacles, at a maximum range of 7 meters directly in front of the unit.

❷ **Sleep timer button (SLEEP)**

❸ **Numeric buttons**

❹ **CD/MP3 play mode/FM mode button (PLAY MODE)**

❺ **Auto scan button (AUTO SCAN)**

❻ **Display select button (DISPLAY)**
- **Press [DISPLAY] to display the clock on the Display panel ⑱.**

❼ **Preset channel select/album skip buttons (∨/⏮ ALBUM, ALBUM ⏭/∧)**

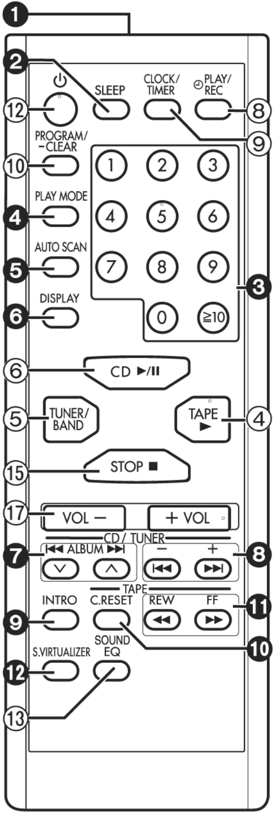
❽ **Tuning/CD skip, search/MP3 track skip/clock/timer adjust buttons (–/⏮, ⏭/+)**

❾ **MP3 intro play button (INTRO)**

❿ **Tape counter reset button (C.RESET)**
- **Press [C.RESET] to reset the tape counter.**
The counter resets to “000”.

⓫ **Tape rewind/fast-forward buttons (◀◀/REW, ▶▶/FF )**

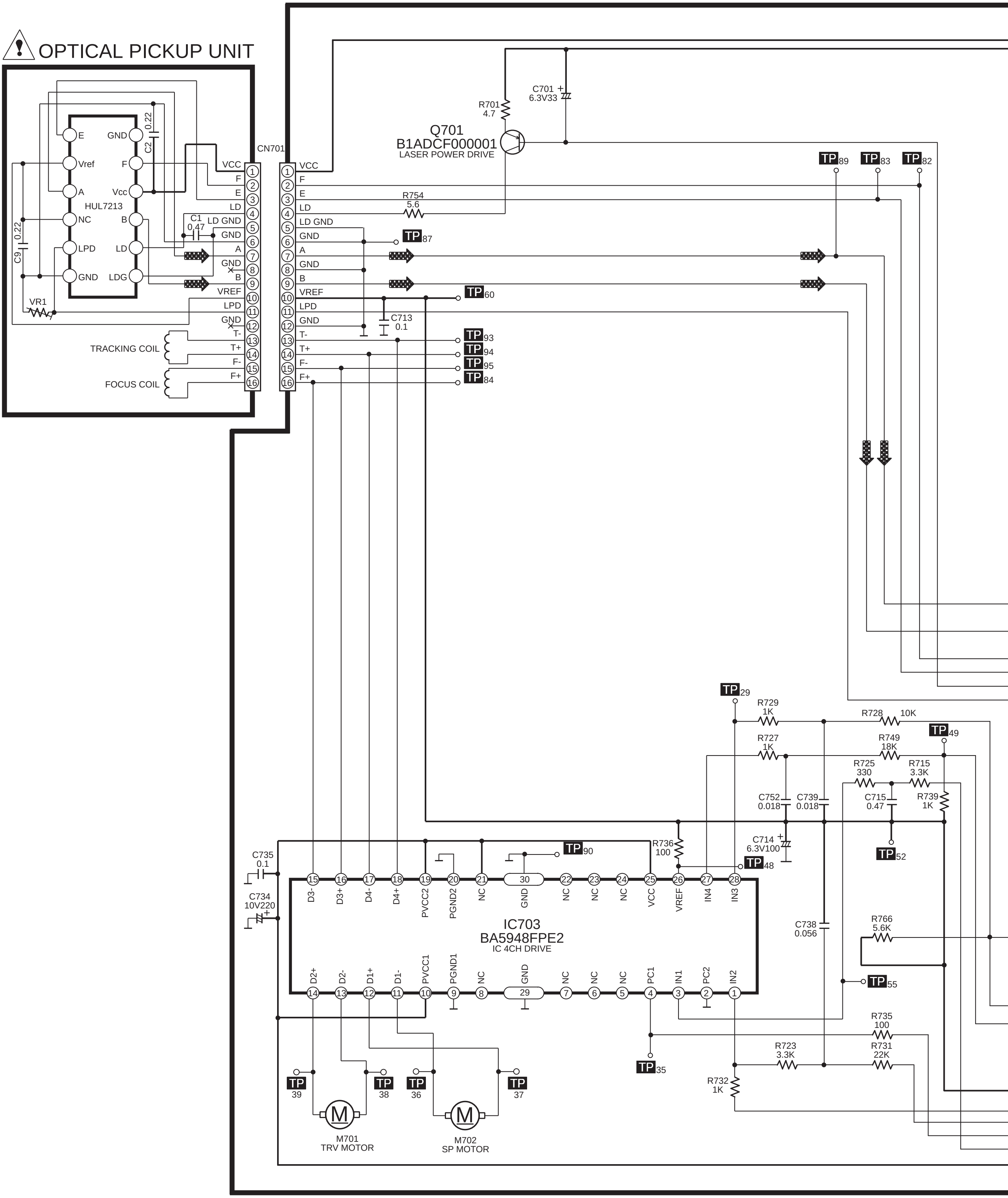
⓬ **Sound virtualizer button (S.VIRTUALIZER)**


❶
❷
⏻
SLEEP
CLOCK/ TIMER
◷ PLAY/ REC
⑫
⑧
⑨
PROGRAM/ –CLEAR
⑩
1
2
3
PLAY MODE
❹
4
5
6
AUTO SCAN
❺
7
8
9
❸
DISPLAY
❻
0
≧10
⑥
CD ▶/II
⑤
TUNER/ BAND
TAPE ▶
④
⑮
STOP ■
⑰
VOL –
+ VOL
CD / TUNER
❼
⏮ ALBUM ⏭
∨
∧
–
+
❽
TAPE
INTRO
C.RESET
REW
FF
⓫
❾
❿
SOUND EQ
S.VIRTUALIZER
⓬
⑬

# SCHEMATIC DIAGRAM - 1

## A CD SERVO CIRCUIT

—— : +B SIGNAL LINE ▨➡ : CD-DA SIGNAL LINE


OPTICAL PICKUP UNIT
HUL7213
E
GND
Vref
F
A
Vcc
NC
B
LPD
LD
GND
LDG
C2 0.22
C9 0.22
C1 0.47
VR1
TRACKING COIL
FOCUS COIL
CN701
VCC
F
E
LD
LD GND
GND
A
GND
B
VREF
LPD
GND
T-
T+
F-
F+
R701 4.7
C701 6.3V33
Q701
B1ADCF000001
LASER POWER DRIVE
R754 5.6
C713 0.1
TP 89
TP 83
TP 82
TP 87
TP 60
TP 93
TP 94
TP 95
TP 84
TP 29
R729 1K
R728 10K
TP 49
R727 1K
R749 18K
R725 330
R715 3.3K
C752 0.018
C739 0.018
C715 0.47
R739 1K
R736 100
C714 6.3V100
TP 52
TP 90
TP 48
C735 0.1
C734 10V220
IC703
BA5948FPE2
IC 4CH DRIVE
D3-
D3+
D4-
D4+
PVCC2
PGND2
NC
GND
VCC
VREF
IN4
IN3
D2+
D2-
D1+
D1-
PVCC1
PGND1
PC1
IN1
PC2
IN2
C738 0.056
R766 5.6K
TP 55
R735 100
R723 3.3K
R731 22K
R732 1K
TP 35
TP 39
TP 38
TP 36
TP 37
M701
TRV MOTOR
M702
SP MOTOR

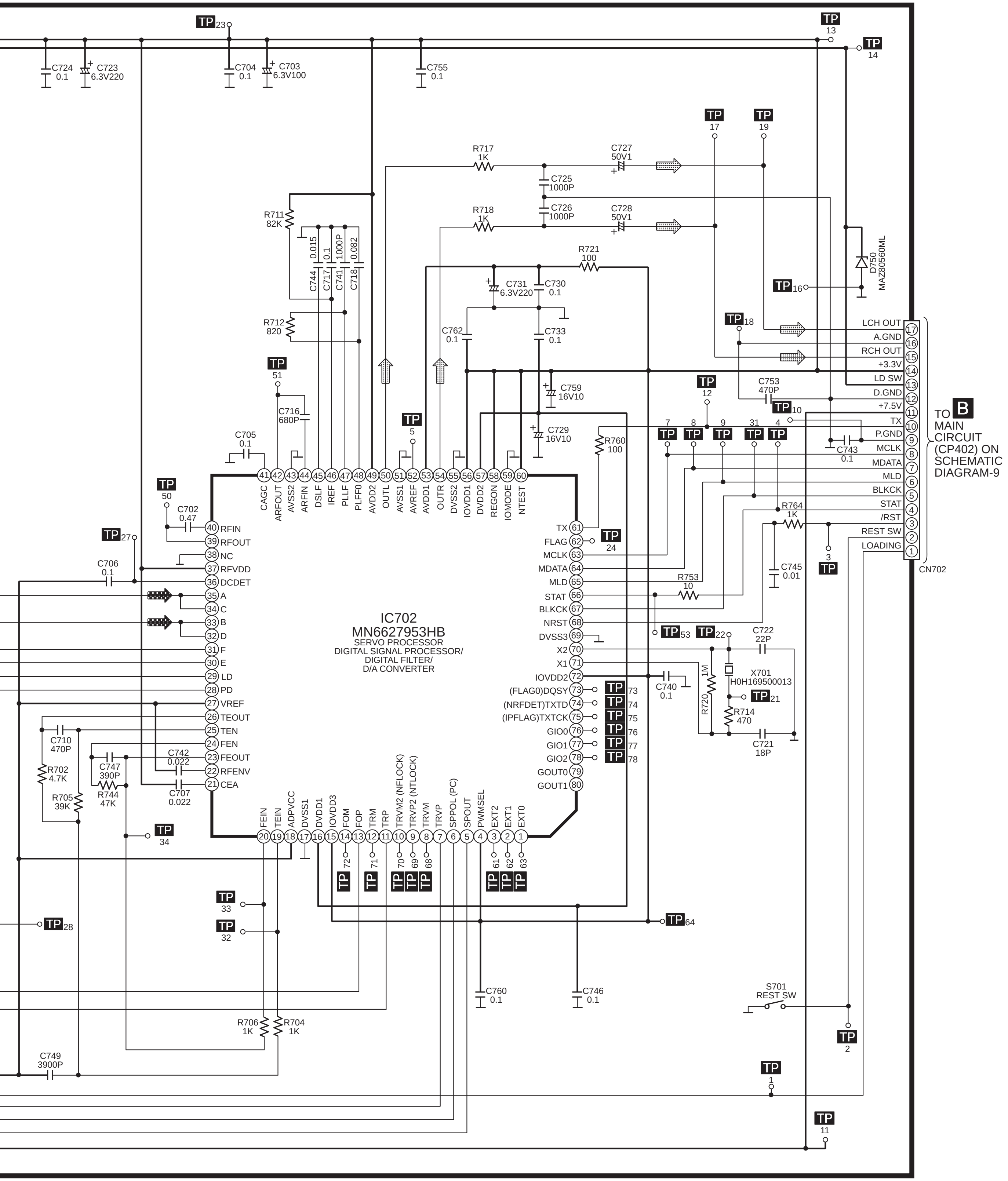
# SCHEMATIC DIAGRAM - 2

## A CD SERVO CIRCUIT

—— : +B SIGNAL LINE

▨ : CD-DA SIGNAL LINE

▨ : CD SIGNAL LINE



TP 23
C724 0.1
C723 6.3V220
C704 0.1
C703 6.3V100
C755 0.1
TP 13
TP 14
TP 17
TP 19
R717 1K
C727 50V1
C725 1000P
C726 1000P
R718 1K
C728 50V1
R711 82K
C744 0.015
C717 0.1
C741 1000P
C718 0.082
R721 100
C731 6.3V220
C730 0.1
D750 MAZ80560ML
TP 16
R712 820
C762 0.1
C733 0.1
TP 18
TP 51
C759 16V10
TP 12
C753 470P
TP 10
C716 680P
TP 5
C729 16V10
R760 100
C705 0.1
TP 7
TP 8
TP 9
TP 31
TP 4
C743 0.1
LCH OUT 17
A.GND 16
RCH OUT 15
+3.3V 14
LD SW 13
D.GND 12
+7.5V 11
TX 10
P.GND 9
MCLK 8
MDATA 7
MLD 6
BLKCK 5
STAT 4
/RST 3
REST SW 2
LOADING 1
CN702
TO B MAIN CIRCUIT (CP402) ON SCHEMATIC DIAGRAM-9
TP 50
C702 0.47
TP 27
C706 0.1
R764 1K
C745 0.01
TP 3
TP 24
R753 10
41 CAGC
42 ARFOUT
43 AVSS2
44 ARFIN
45 DSLF
46 IREF
47 PLLF
48 PLFF0
49 AVDD2
50 OUTL
51 AVSS1
52 AVREF
53 AVDD1
54 OUTR
55 DVSS2
56 IOVDD1
57 DVDD2
58 REGON
59 IOMODE
60 NTEST
40 RFIN
39 RFOUT
38 NC
37 RFVDD
36 DCDET
35 A
34 C
33 B
32 D
31 F
30 E
29 LD
28 PD
27 VREF
26 TEOUT
25 TEN
24 FEN
23 FEOUT
22 RFENV
21 CEA
TX 61
FLAG 62
MCLK 63
MDATA 64
MLD 65
STAT 66
BLKCK 67
NRST 68
DVSS3 69
X2 70
X1 71
IOVDD2 72
(FLAG0)DQSY 73
(NRFDET)TXTD 74
(IPFLAG)TXTCK 75
GIO0 76
GIO1 77
GIO2 78
GOUT0 79
GOUT1 80
IC702
MN6627953HB
SERVO PROCESSOR
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
TP 53
TP 22
C722 22P
X701 H0H169500013
TP 21
R720 1M
R714 470
C721 18P
C740 0.1
TP 73
TP 74
TP 75
TP 76
TP 77
TP 78
C710 470P
R702 4.7K
R705 39K
C747 390P
R744 47K
C742 0.022
C707 0.022
TP 34
20 FEIN
19 TEIN
18 ADPVCC
17 DVSS1
16 DVDD1
15 IOVDD3
14 FOM
13 FOP
12 TRM
11 TRP
10 TRVM2 (NFLOCK)
9 TRVP2 (NTLOCK)
8 TRVM
7 TRVP
6 SPPOL (PC)
5 SPOUT
4 PWMSEL
3 EXT2
2 EXT1
1 EXT0
TP 72
TP 71
TP 70
TP 69
TP 68
TP 61
TP 62
TP 63
TP 33
TP 32
TP 28
TP 64
C760 0.1
C746 0.1
S701 REST SW
TP 2
R706 1K
R704 1K
C749 3900P
TP 1
TP 11

# SCHEMATIC DIAGRAM-3

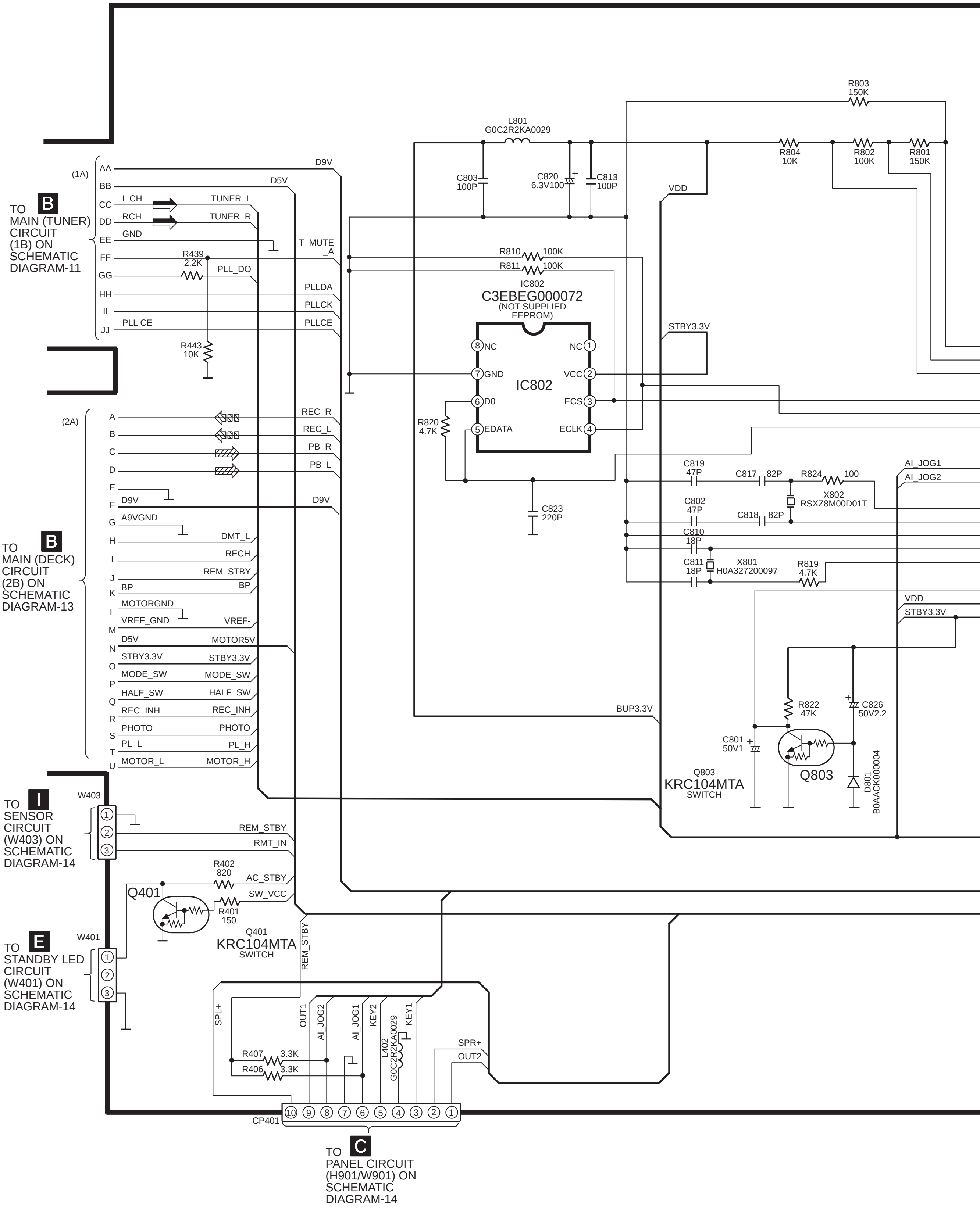
## B MAIN CIRCUIT

: +B SIGNAL LINE

: FM/AM SIGNAL LINE

: PLAYBACK SIGNAL LINE

: RECORD SIGNAL LINE

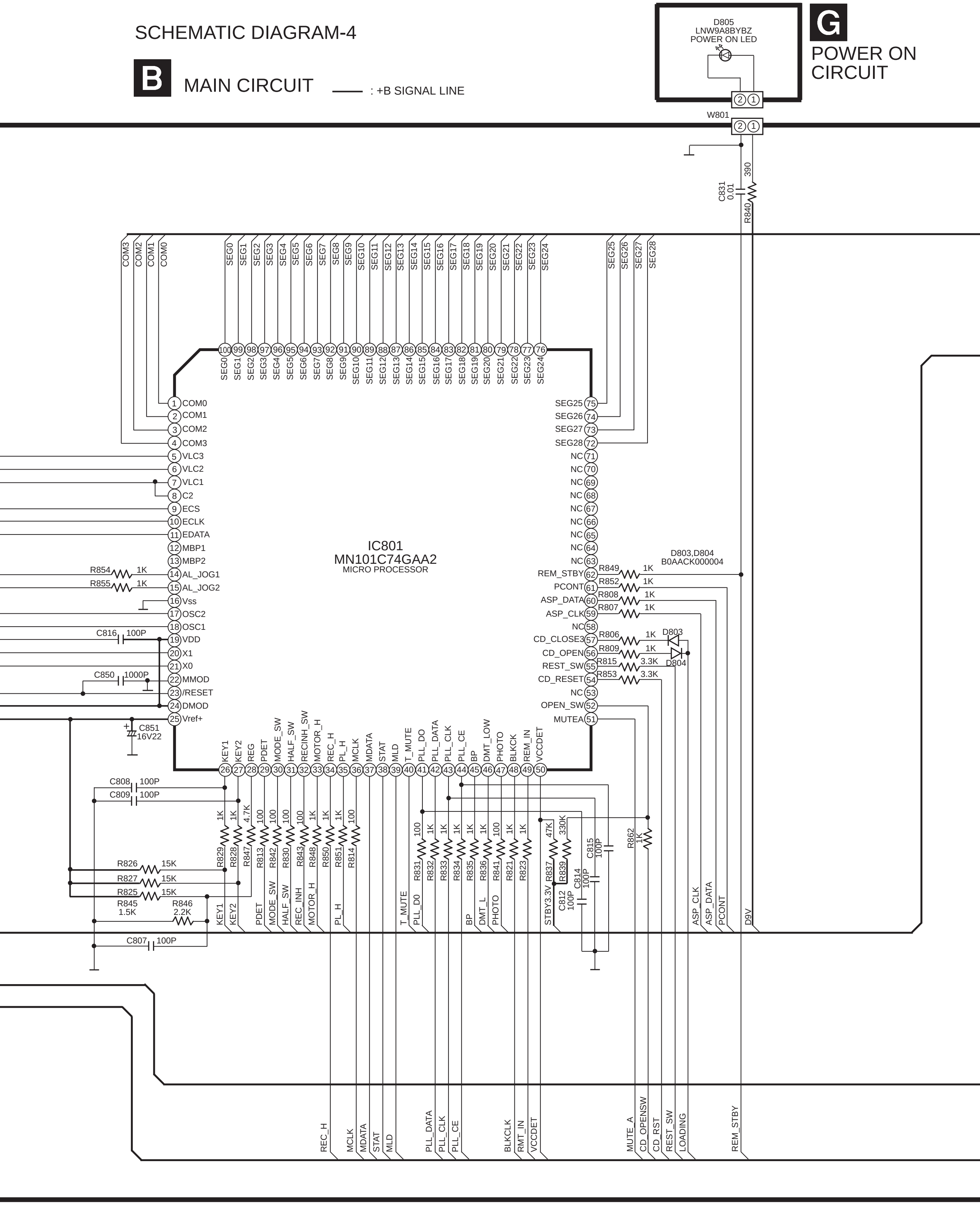

TO B MAIN (TUNER) CIRCUIT (1B) ON SCHEMATIC DIAGRAM-11
(1A)
AA D9V
BB D5V
CC L CH TUNER_L
DD RCH TUNER_R
EE GND
FF R439 2.2K T_MUTE _A
GG PLL_DO
HH PLLDA
II PLLCK
JJ PLL CE PLLCE
R443 10K
TO B MAIN (DECK) CIRCUIT (2B) ON SCHEMATIC DIAGRAM-13
(2A)
A REC_R
B REC_L
C PB_R
D PB_L
E
F D9V D9V
G A9VGND
H DMT_L
I RECH
J REM_STBY
K BP BP
L MOTORGND
M VREF_GND VREF-
N D5V MOTOR5V
O STBY3.3V STBY3.3V
P MODE_SW MODE_SW
Q HALF_SW HALF_SW
R REC_INH REC_INH
S PHOTO PHOTO
T PL_L PL_H
U MOTOR_L MOTOR_H
TO I SENSOR CIRCUIT (W403) ON SCHEMATIC DIAGRAM-14
W403
REM_STBY
RMT_IN
R402 820
AC_STBY
SW_VCC
Q401
R401 150
Q401 KRC104MTA SWITCH
TO E STANDBY LED CIRCUIT (W401) ON SCHEMATIC DIAGRAM-14
W401
REM_STBY
SPL+
OUT1
AI_JOG2
AI_JOG1
KEY2
KEY1
L402 G0C2R2KA0029
R407 3.3K
R406 3.3K
SPR+
OUT2
CP401
TO C PANEL CIRCUIT (H901/W901) ON SCHEMATIC DIAGRAM-14
L801 G0C2R2KA0029
C803 100P
C820 6.3V100
C813 100P
R803 150K
R804 10K
R802 100K
R801 150K
VDD
R810 100K
R811 100K
IC802 C3EBEG000072 (NOT SUPPLIED EEPROM)
8 NC
7 GND
6 D0
5 EDATA
NC 1
VCC 2
ECS 3
ECLK 4
IC802
R820 4.7K
C823 220P
STBY3.3V
C819 47P
C817 82P
R824 100
X802 RSXZ8M00D01T
C802 47P
C818 82P
C810 18P
C811 18P
X801 H0A327200097
R819 4.7K
AI_JOG1
AI_JOG2
VDD
STBY3.3V
BUP3.3V
R822 47K
C826 50V2.2
C801 50V1
Q803
Q803 KRC104MTA SWITCH
D801 B0AACK000004

# SCHEMATIC DIAGRAM-4

## B MAIN CIRCUIT

: +B SIGNAL LINE

## G POWER ON CIRCUIT


D805
LNW9A8BYBZ
POWER ON LED
W801
C831 0.01
R840 390
D9V
IC801
MN101C74GAA2
MICRO PROCESSOR
COM0 COM1 COM2 COM3
SEG0 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG18 SEG19 SEG20 SEG21 SEG22 SEG23 SEG24
SEG25 SEG26 SEG27 SEG28
1 COM0
2 COM1
3 COM2
4 COM3
5 VLC3
6 VLC2
7 VLC1
8 C2
9 ECS
10 ECLK
11 EDATA
12 MBP1
13 MBP2
14 AL_JOG1
15 AL_JOG2
16 Vss
17 OSC2
18 OSC1
19 VDD
20 X1
21 X0
22 MMOD
23 /RESET
24 DMOD
25 Vref+
26 KEY1
27 KEY2
28 REG
29 PDET
30 MODE_SW
31 HALF_SW
32 RECINH_SW
33 MOTOR_H
34 REC_H
35 PL_H
36 MCLK
37 MDATA
38 STAT
39 MLD
40 T_MUTE
41 PLL_DO
42 PLL_DATA
43 PLL_CLK
44 PLL_CE
45 BP
46 DMT_LOW
47 PHOTO
48 BLKCK
49 REM_IN
50 VCCDET
51 MUTEA
52 OPEN_SW
53 NC
54 CD_RESET
55 REST_SW
56 CD_OPEN
57 CD_CLOSE3
58 NC
59 ASP_CLK
60 ASP_DATA
61 PCONT
62 REM_STBY
63 NC
64 NC
65 NC
66 NC
67 NC
68 NC
69 NC
70 NC
71 NC
72 SEG28
73 SEG27
74 SEG26
75 SEG25
76 SEG24 … 100 SEG0
R854 1K
R855 1K
C816 100P
C850 1000P
C851 16V22
C808 100P
C809 100P
C807 100P
R826 15K
R827 15K
R825 15K
R845 1.5K
R846 2.2K
R829 1K
R828 1K
R847 4.7K
R813 100
R842 100
R830 100
R843 100
R848 1K
R850 1K
R851 1K
R814 100
R831 100
R832 1K
R833 1K
R834 1K
R835 1K
R836 1K
R841 100
R821 1K
R823 1K
R837 47K
R839 330K
C812 100P
C814 100P
C815 100P
R862 1K
R849 1K
R852 1K
R808 1K
R807 1K
R806 1K
R809 1K
R815 3.3K
R853 3.3K
D803,D804
B0AACK000004
D803
D804
STBY3.3V
KEY1 KEY2 PDET MODE_SW HALF_SW REC_INH MOTOR_H PL_H T_MUTE PLL_DO BP DMT_L PHOTO
ASP_CLK ASP_DATA PCONT D9V
REC_H MCLK MDATA STAT MLD PLL_DATA PLL_CLK PLL_CE BLKCLK RMT_IN VCCDET MUTE_A CD_OPENSW CD_RST REST_SW LOADING REM_STBY

# SCHEMATIC DIAGRAM-5

**B** MAIN CIRCUIT

— : +B SIGNAL LINE

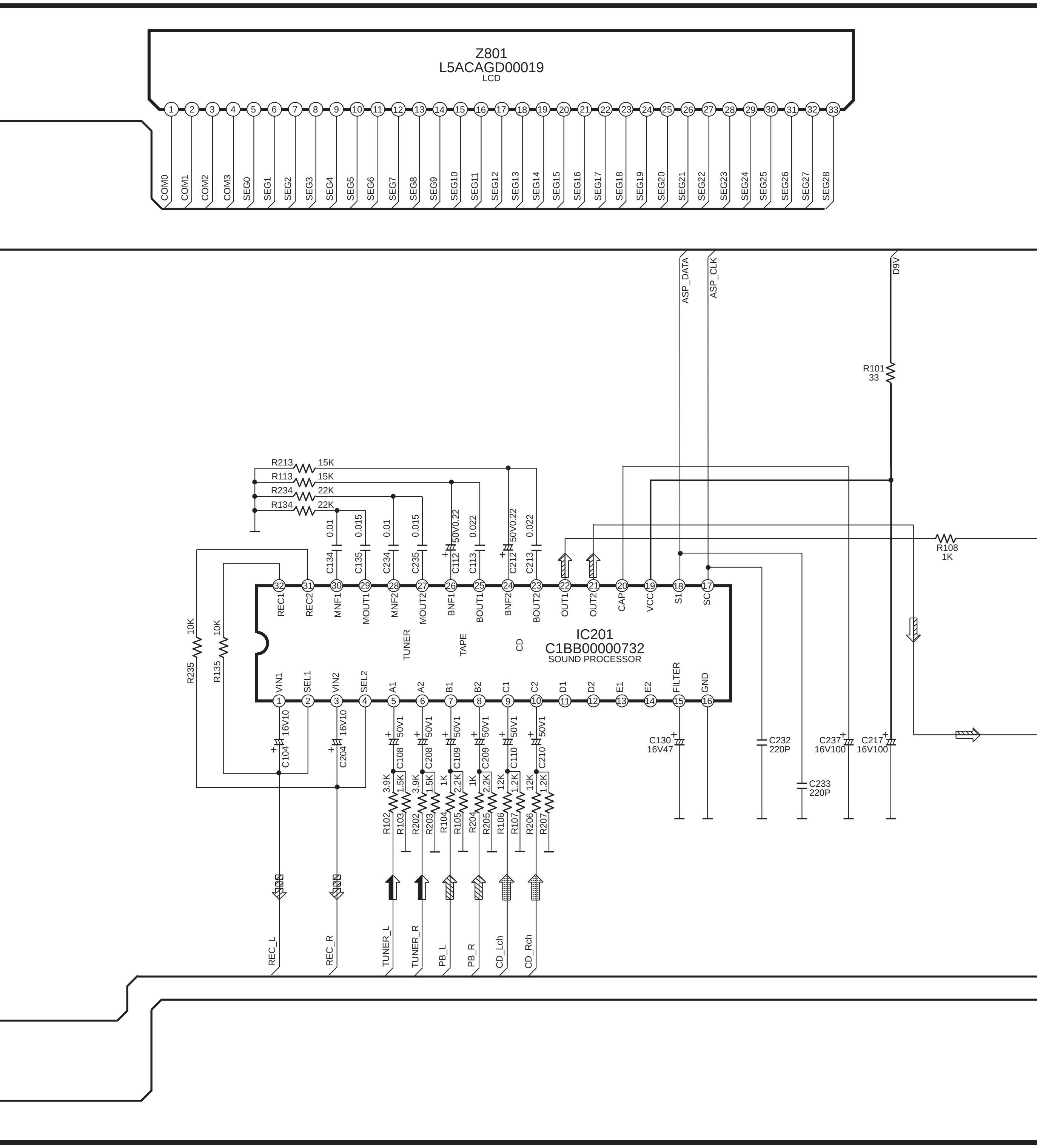
⇨ : MAIN SIGNAL LINE

⇨ : CD SIGNAL LINE

➡ : FM/AM SIGNAL LINE

⇨ : PLAYBACK SIGNAL LINE

⇨ : RECORD SIGNAL LINE

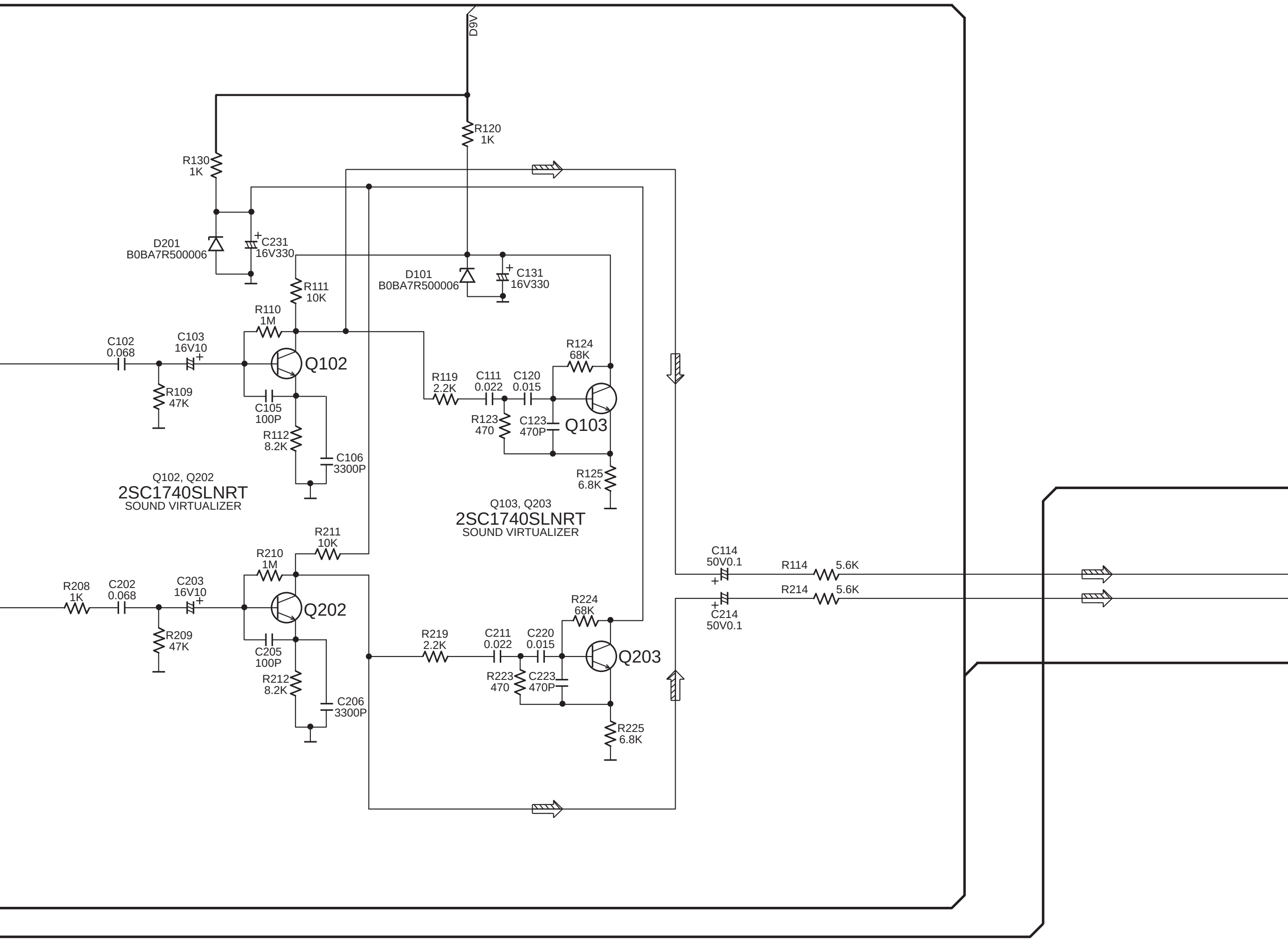

Z801
L5ACAGD00019
LCD
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
COM0 COM1 COM2 COM3 SEG0 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG18 SEG19 SEG20 SEG21 SEG22 SEG23 SEG24 SEG25 SEG26 SEG27 SEG28
ASP_DATA
ASP_CLK
D9V
R101
33
R108
1K
R213 15K
R113 15K
R234 22K
R134 22K
C134 0.01
C135 0.015
C234 0.01
C235 0.015
C112 50V0.22
C113 0.022
C212 50V0.22
C213 0.022
IC201
C1BB00000732
SOUND PROCESSOR
TUNER
TAPE
CD
REC1 REC2 MNF1 MOUT1 MNF2 MOUT2 BNF1 BOUT1 BNF2 BOUT2 OUT1 OUT2 CAP VCC S1 SC
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
VIN1 SEL1 VIN2 SEL2 A1 A2 B1 B2 C1 C2 D1 D2 E1 E2 FILTER GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
R235 10K
R135 10K
C104 16V10
C204 16V10
C108 50V1
C208 50V1
C109 50V1
C209 50V1
C110 50V1
C210 50V1
R102 3.9K
R103 1.5K
R202 3.9K
R203 1.5K
R104 1K
R105 2.2K
R204 1K
R205 2.2K
R106 12K
R107 1.2K
R206 12K
R207 1.2K
C130 16V47
C232 220P
C233 220P
C237 16V100
C217 16V100
REC_L
REC_R
TUNER_L
TUNER_R
PB_L
PB_R
CD_Lch
CD_Rch

## SCHEMATIC DIAGRAM-6

**B** MAIN CIRCUIT

—— : +B SIGNAL LINE

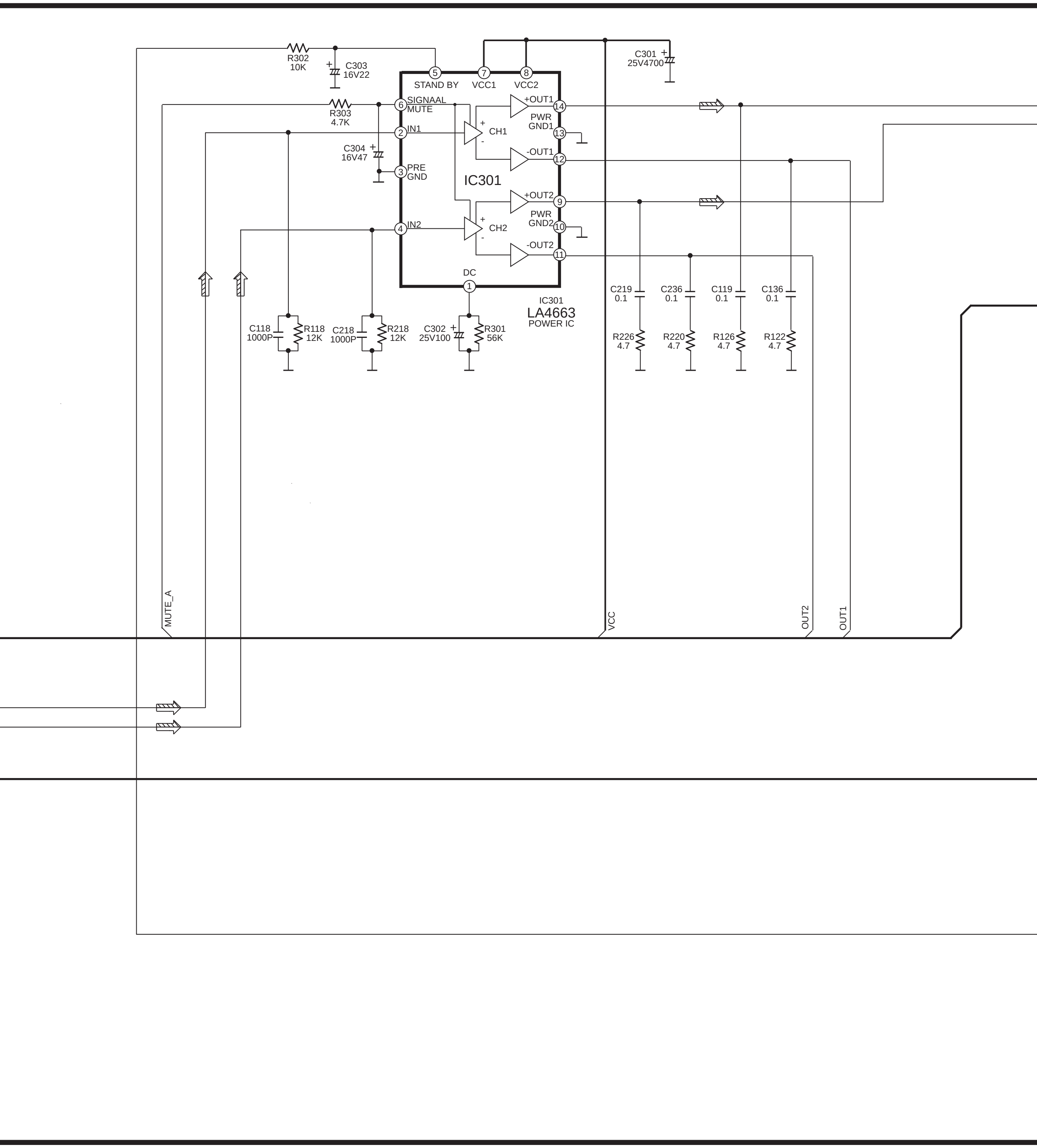
⇨ : MAIN SIGNAL LINE


D9V
R120
1K
R130
1K
D201
B0BA7R500006
C231
16V330
D101
B0BA7R500006
C131
16V330
R111
10K
R110
1M
C102
0.068
C103
16V10
Q102
R109
47K
C105
100P
R112
8.2K
C106
3300P
R124
68K
R119
2.2K
C111
0.022
C120
0.015
R123
470
C123
470P
Q103
R125
6.8K
Q102, Q202
2SC1740SLNRT
SOUND VIRTUALIZER
Q103, Q203
2SC1740SLNRT
SOUND VIRTUALIZER
R211
10K
R210
1M
R208
1K
C202
0.068
C203
16V10
Q202
R209
47K
C205
100P
R212
8.2K
C206
3300P
R224
68K
R219
2.2K
C211
0.022
C220
0.015
R223
470
C223
470P
Q203
R225
6.8K
C114
50V0.1
R114
5.6K
R214
5.6K
C214
50V0.1

# SCHEMATIC DIAGRAM-7

## B MAIN CIRCUIT

—— : +B SIGNAL LINE
⇨ : MAIN SIGNAL LINE


R302
10K
C303
16V22
R303
4.7K
C304
16V47
5
STAND BY
7
VCC1
8
VCC2
C301
25V4700
6
SIGNAAL
MUTE
2
IN1
3
PRE
GND
4
IN2
CH1
CH2
IC301
+OUT1
14
PWR
GND1
13
-OUT1
12
+OUT2
9
PWR
GND2
10
-OUT2
11
DC
1
IC301
LA4663
POWER IC
C118
1000P
R118
12K
C218
1000P
R218
12K
C302
25V100
R301
56K
C219
0.1
C236
0.1
C119
0.1
C136
0.1
R226
4.7
R220
4.7
R126
4.7
R122
4.7
MUTE_A
VCC
OUT2
OUT1

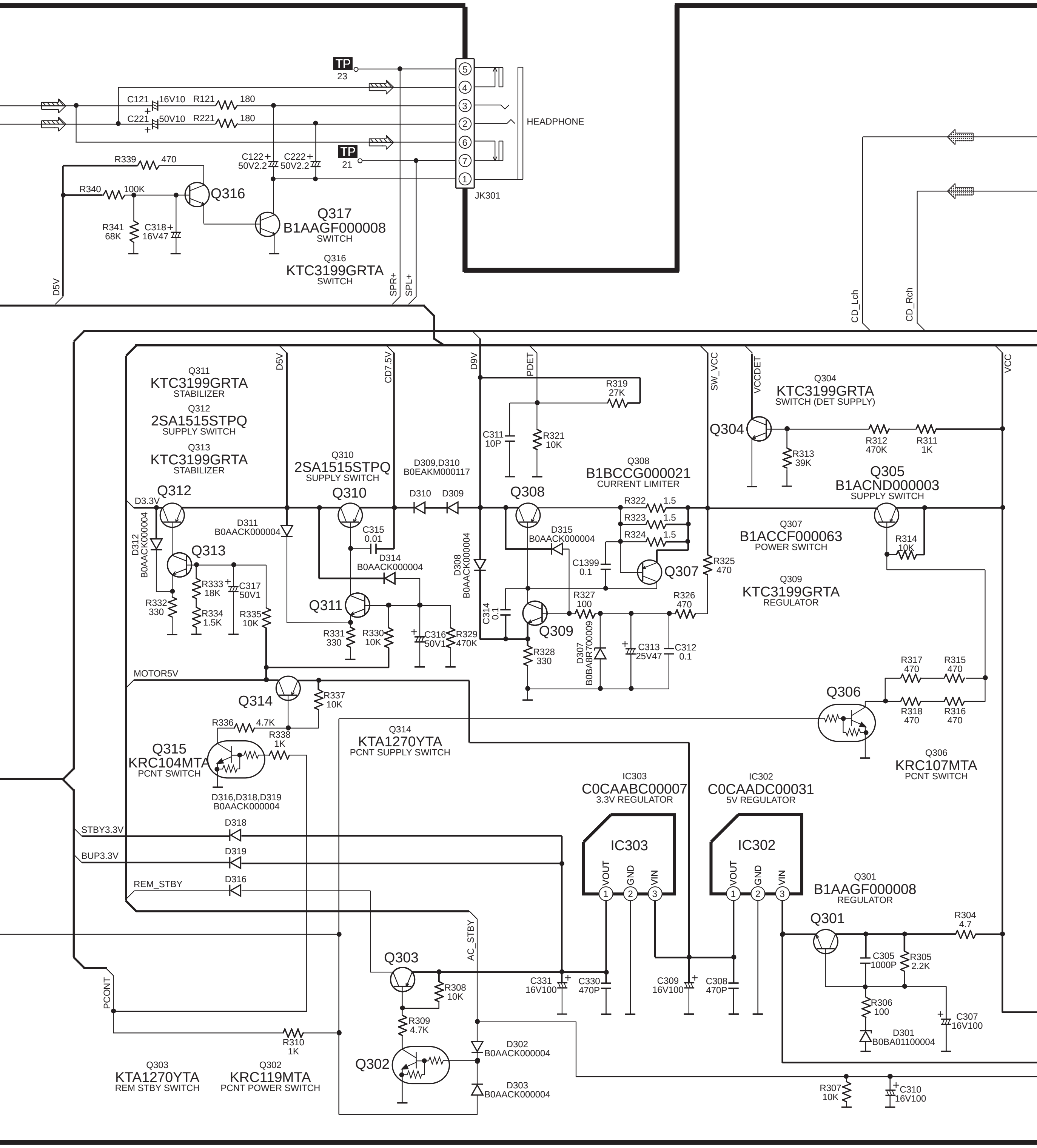
# SCHEMATIC DIAGRAM-8

## B MAIN CIRCUIT

—— : +B SIGNAL LINE

⇨ : MAIN SIGNAL LINE

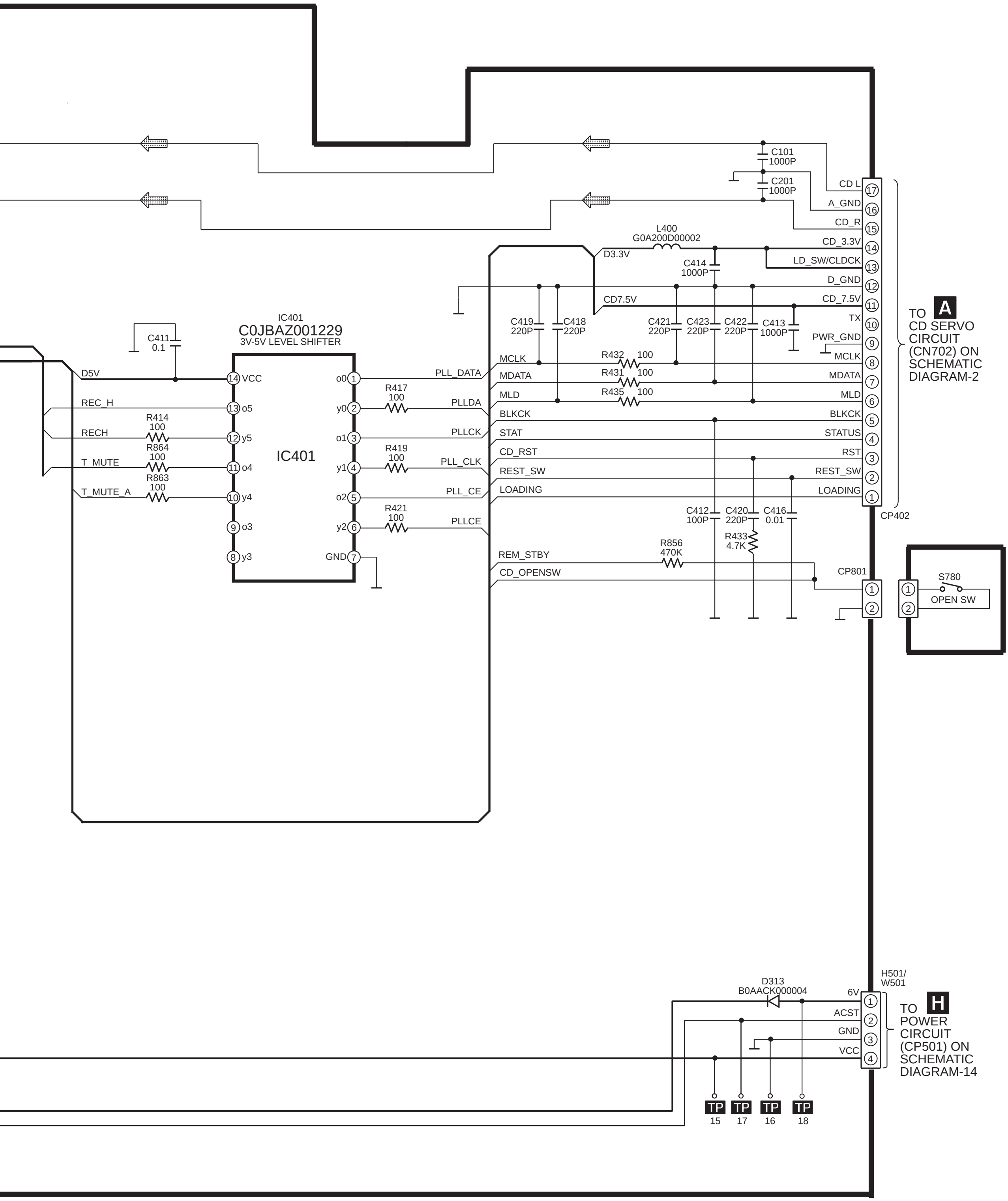
⇨ : CD SIGNAL LINE



TP 23
TP 21
C121 16V10
R121 180
C221 50V10
R221 180
C122 50V2.2
C222 50V2.2
R339 470
R340 100K
R341 68K
C318 16V47
Q316
Q317 B1AAGF000008 SWITCH
Q316 KTC3199GRTA SWITCH
JK301
HEADPHONE
D5V
SPR+
SPL+
CD_Lch
CD_Rch
D5V
CD7.5V
D9V
PDET
SW_VCC
VCCDET
VCC
Q311 KTC3199GRTA STABILIZER
Q312 2SA1515STPQ SUPPLY SWITCH
Q313 KTC3199GRTA STABILIZER
Q310 2SA1515STPQ SUPPLY SWITCH
D309,D310 B0EAKM000117
R319 27K
C311 10P
R321 10K
Q304 KTC3199GRTA SWITCH (DET SUPPLY)
Q304
R312 470K
R311 1K
R313 39K
Q308 B1BCCG000021 CURRENT LIMITER
Q305 B1ACND000003 SUPPLY SWITCH
Q312
D3.3V
Q310
D310
D309
Q308
R322 1.5
R323 1.5
R324 1.5
Q305
D312 B0AACK000004
Q313
D311 B0AACK000004
C315 0.01
D314 B0AACK000004
D308 B0AACK000004
D315 B0AACK000004
C1399 0.1
Q307
R325 470
Q307 B1ACCF000063 POWER SWITCH
R314 10K
Q309 KTC3199GRTA REGULATOR
R333 18K
C317 50V1
R332 330
R334 1.5K
R335 10K
Q311
R331 330
R330 10K
C316 50V1
R329 470K
C314 0.1
R327 100
R326 470
Q309
D307 B0BA8R700009
R328 330
C313 25V47
C312 0.1
MOTOR5V
Q314
R337 10K
R317 470
R315 470
Q306
R318 470
R316 470
R336 4.7K
R338 1K
Q315 KRC104MTA PCNT SWITCH
Q314 KTA1270YTA PCNT SUPPLY SWITCH
Q306 KRC107MTA PCNT SWITCH
D316,D318,D319 B0AACK000004
IC303 C0CAABC00007 3.3V REGULATOR
IC302 C0CAADC00031 5V REGULATOR
STBY3.3V
D318
BUP3.3V
D319
REM_STBY
D316
IC303
VOUT GND VIN
1 2 3
IC302
VOUT GND VIN
1 2 3
Q301 B1AAGF000008 REGULATOR
Q301
R304 4.7
AC_STBY
Q303
C331 16V100
C330 470P
C309 16V100
C308 470P
C305 1000P
R305 2.2K
R308 10K
R306 100
C307 16V100
PCONT
R309 4.7K
D301 B0BA01100004
R310 1K
D302 B0AACK000004
Q302
D303 B0AACK000004
R307 10K
C310 16V100
Q303 KTA1270YTA REM STBY SWITCH
Q302 KRC119MTA PCNT POWER SWITCH

SCHEMATIC DIAGRAM-9

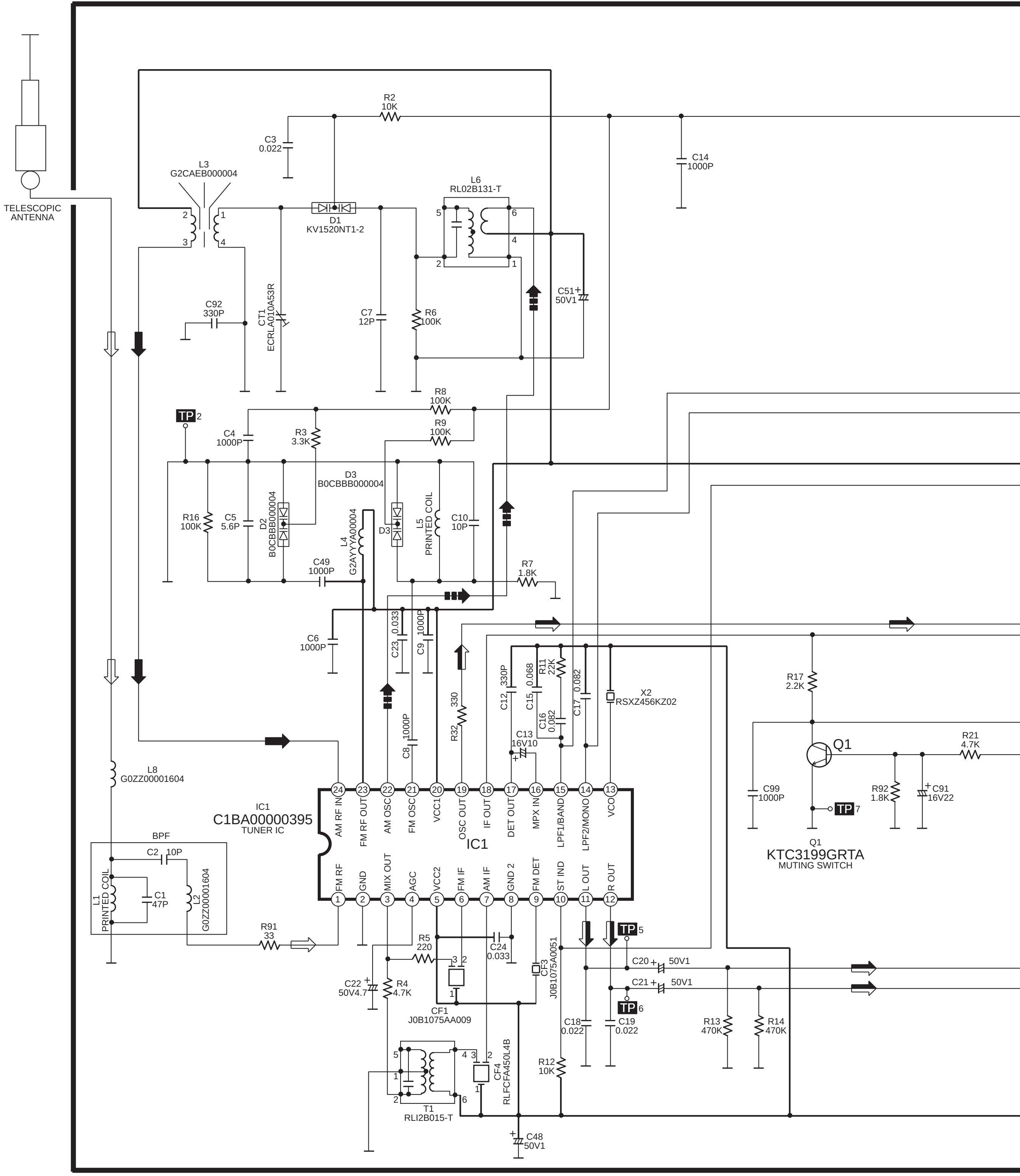
**B** MAIN CIRCUIT —— : +B SIGNAL LINE ⇨ : CD SIGNAL LINE


C101
1000P
C201
1000P
CD L
A_GND
CD_R
CD_3.3V
LD_SW/CLDCK
D_GND
CD_7.5V
TX
PWR_GND
MCLK
MDATA
MLD
BLKCK
STATUS
RST
REST_SW
LOADING
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
CP402
TO A
CD SERVO
CIRCUIT
(CN702) ON
SCHEMATIC
DIAGRAM-2
L400
G0A200D00002
D3.3V
C414
1000P
CD7.5V
C419
220P
C418
220P
C421
220P
C423
220P
C422
220P
C413
1000P
R432 100
R431 100
R435 100
IC401
C0JBAZ001229
3V-5V LEVEL SHIFTER
C411
0.1
D5V
REC_H
R414
100
RECH
R864
100
T_MUTE
R863
100
T_MUTE_A
14 VCC
13 o5
12 y5
11 o4
10 y4
9 o3
8 y3
IC401
o0 1
y0 2
o1 3
y1 4
o2 5
y2 6
GND 7
R417
100
R419
100
R421
100
PLL_DATA
PLLDA
PLLCK
PLL_CLK
PLL_CE
PLLCE
MCLK
MDATA
MLD
BLKCK
STAT
CD_RST
REST_SW
LOADING
C412
100P
C420
220P
C416
0.01
R433
4.7K
R856
470K
REM_STBY
CD_OPENSW
CP801
1
2
S780
OPEN SW
1
2
D313
B0AACK000004
H501/
W501
6V
ACST
GND
VCC
1
2
3
4
TO H
POWER
CIRCUIT
(CP501) ON
SCHEMATIC
DIAGRAM-14
TP
15
TP
17
TP
16
TP
18

# SCHEMATIC DIAGRAM - 10

## B MAIN (TUNER) CIRCUIT

⇨ : FM/AM SIGNAL LINE
➡ : AM SIGNAL LINE
— : +B SIGNAL LINE
➡ : AM OSC SIGNAL LINE
⇨ : FM OSC SIGNAL LINE

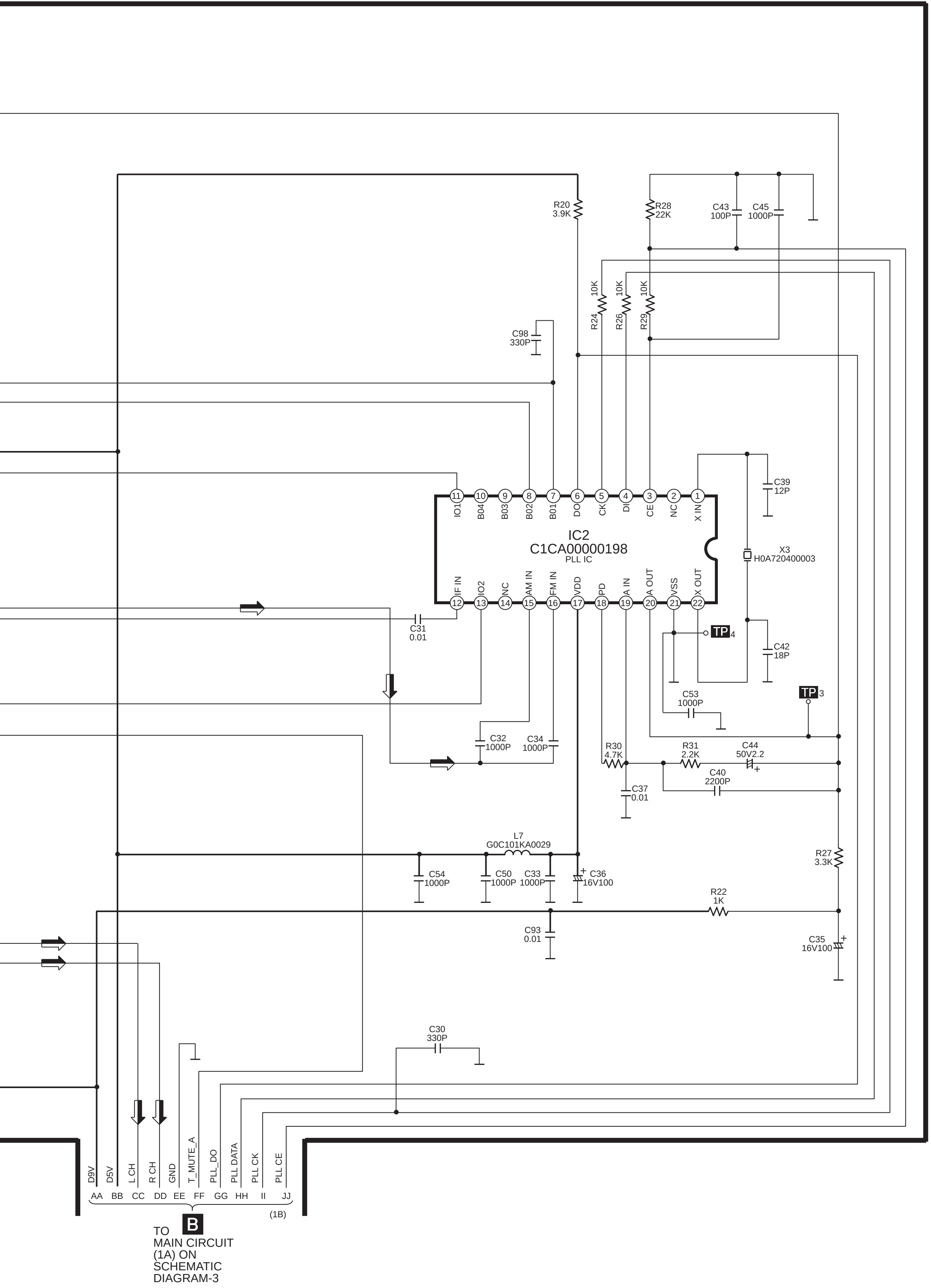

TELESCOPIC ANTENNA
L3
G2CAEB000004
C3
0.022
R2
10K
D1
KV1520NT1-2
L6
RL02B131-T
C14
1000P
C92
330P
CT1
ECRLA010A53R
C7
12P
R6
100K
C51
50V1
TP 2
C4
1000P
R3
3.3K
R8
100K
R9
100K
D3
B0CBBB000004
R16
100K
C5
5.6P
D2
B0CBBB000004
L4
G2AYYYA00004
D3
L5
PRINTED COIL
C10
10P
C49
1000P
R7
1.8K
C6
1000P
C23
0.033
C9
1000P
C8
1000P
R32
330
C12
330P
C15
0.068
R11
22K
C16
0.082
C17
0.082
C13
16V10
X2
RSXZ456KZ02
R17
2.2K
Q1
R21
4.7K
C99
1000P
R92
1.8K
C91
16V22
TP 7
Q1
KTC3199GRTA
MUTING SWITCH
L8
G0ZZ00001604
IC1
C1BA00000395
TUNER IC
IC1
AM RF IN
FM RF OUT
AM OSC
FM OSC
VCC1
OSC OUT
IF OUT
DET OUT
MPX IN
LPF1/BAND
LPF2/MONO
VCO
FM RF
GND
MIX OUT
AGC
VCC2
FM IF
AM IF
GND 2
FM DET
ST IND
L OUT
R OUT
BPF
C2
10P
L1
PRINTED COIL
C1
47P
L2
G0ZZ00001604
R91
33
R5
220
C24
0.033
CF3
J0B1075A0051
TP 5
C20
50V1
C21
50V1
TP 6
C22
50V4.7
R4
4.7K
CF1
J0B1075AA009
C18
0.022
C19
0.022
R13
470K
R14
470K
R12
10K
T1
RLI2B015-T
CF4
RLFCFA450L4B
C48
50V1

# SCHEMATIC DIAGRAM - 11

## B MAIN (TUNER) CIRCUIT

⇨ : FM/AM SIGNAL LINE

—— : +B SIGNAL LINE


R20
3.9K
R28
22K
C43
100P
C45
1000P
R24
10K
R26
10K
R29
10K
C98
330P
IC2
C1CA00000198
PLL IC
IO1
B04
B03
B02
B01
DO
CK
DI
CE
NC
X IN
IF IN
IO2
NC
AM IN
FM IN
VDD
PD
A IN
A OUT
VSS
X OUT
C39
12P
X3
H0A720400003
C42
18P
TP 4
TP 3
C53
1000P
C31
0.01
C32
1000P
C34
1000P
R30
4.7K
R31
2.2K
C44
50V2.2
C40
2200P
C37
0.01
L7
G0C101KA0029
C54
1000P
C50
1000P
C33
1000P
C36
16V100
R27
3.3K
R22
1K
C93
0.01
C35
16V100
C30
330P
D9V
D5V
L CH
R CH
GND
T_MUTE_A
PLL_DO
PLL DATA
PLL CK
PLL CE
AA
BB
CC
DD
EE
FF
GG
HH
II
JJ
(1B)
TO B MAIN CIRCUIT (1A) ON SCHEMATIC DIAGRAM-3

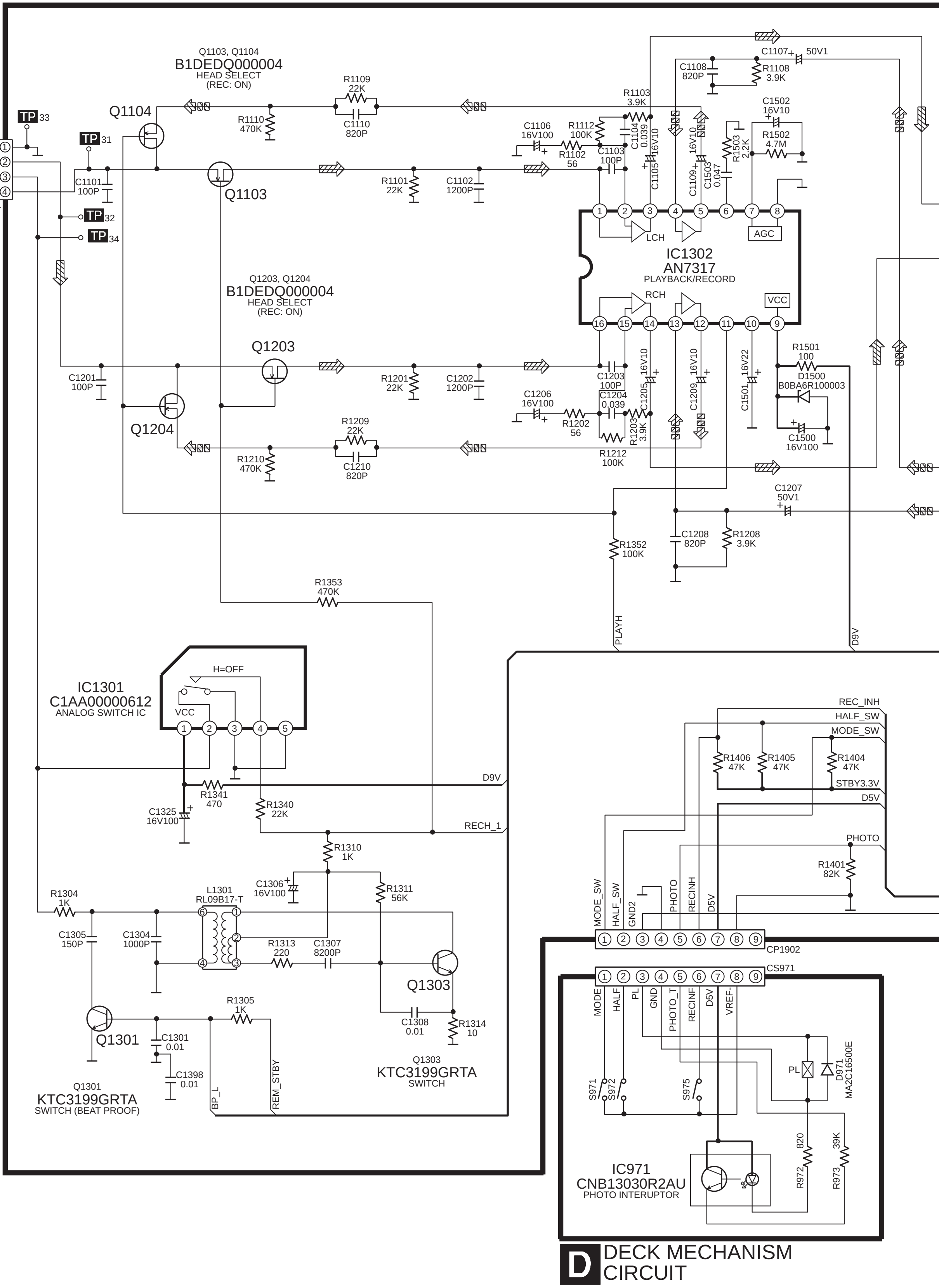
# SCHEMATIC DIAGRAM-12

## B MAIN (DECK) CIRCUIT

—— : +B SIGNAL LINE

▨ : PLAYBACK SIGNAL LINE

▨ : +B SIGNAL LINE


RECORD/PLAY HEAD
L
R
CP1301
① ② ③ ④
TP 33
TP 31
TP 32
TP 34
C1101 100P
Q1103, Q1104
B1DEDQ000004
HEAD SELECT
(REC: ON)
Q1104
Q1103
R1110 470K
R1109 22K
C1110 820P
R1101 22K
C1102 1200P
C1106 16V100
R1112 100K
R1102 56
R1103 3.9K
C1104 0.039
C1103 100P
C1105 16V10
C1109 16V10
C1503 0.047
R1503 2.2K
C1107 50V1
C1108 820P
R1108 3.9K
C1502 16V10
R1502 4.7M
LCH
AGC
IC1302
AN7317
PLAYBACK/RECORD
RCH
VCC
Q1203, Q1204
B1DEDQ000004
HEAD SELECT
(REC: ON)
Q1203
Q1204
C1201 100P
R1201 22K
C1202 1200P
R1210 470K
R1209 22K
C1210 820P
C1203 100P
C1205 16V10
C1204 0.039
C1206 16V100
R1202 56
R1203 3.9K
R1212 100K
C1209 16V10
C1501 16V22
R1501 100
D1500
B0BA6R100003
C1500 16V100
C1207 50V1
C1208 820P
R1208 3.9K
R1352 100K
R1353 470K
PLAYH
D9V
IC1301
C1AA00000612
ANALOG SWITCH IC
H=OFF
VCC
D9V
R1341 470
C1325 16V100
R1340 22K
RECH_1
R1310 1K
C1306 16V100
R1311 56K
R1304 1K
C1305 150P
C1304 1000P
L1301
RL09B17-T
R1313 220
C1307 8200P
Q1303
C1308 0.01
R1314 10
Q1301
C1301 0.01
C1398 0.01
R1305 1K
BP_L
REM_STBY
Q1303
KTC3199GRTA
SWITCH
Q1301
KTC3199GRTA
SWITCH (BEAT PROOF)
REC_INH
HALF_SW
MODE_SW
R1406 47K
R1405 47K
R1404 47K
STBY3.3V
D5V
PHOTO
R1401 82K
MODE_SW
HALF_SW
GND2
PHOTO
RECINH
D5V
CP1902
CS971
MODE
HALF
PL
GND
PHOTO_T
RECINF
D5V
VREF-
S971
S972
S975
PL
D971
MA2C16500E
R972 820
R973 39K
IC971
CNB13030R2AU
PHOTO INTERUPTOR
D DECK MECHANISM CIRCUIT

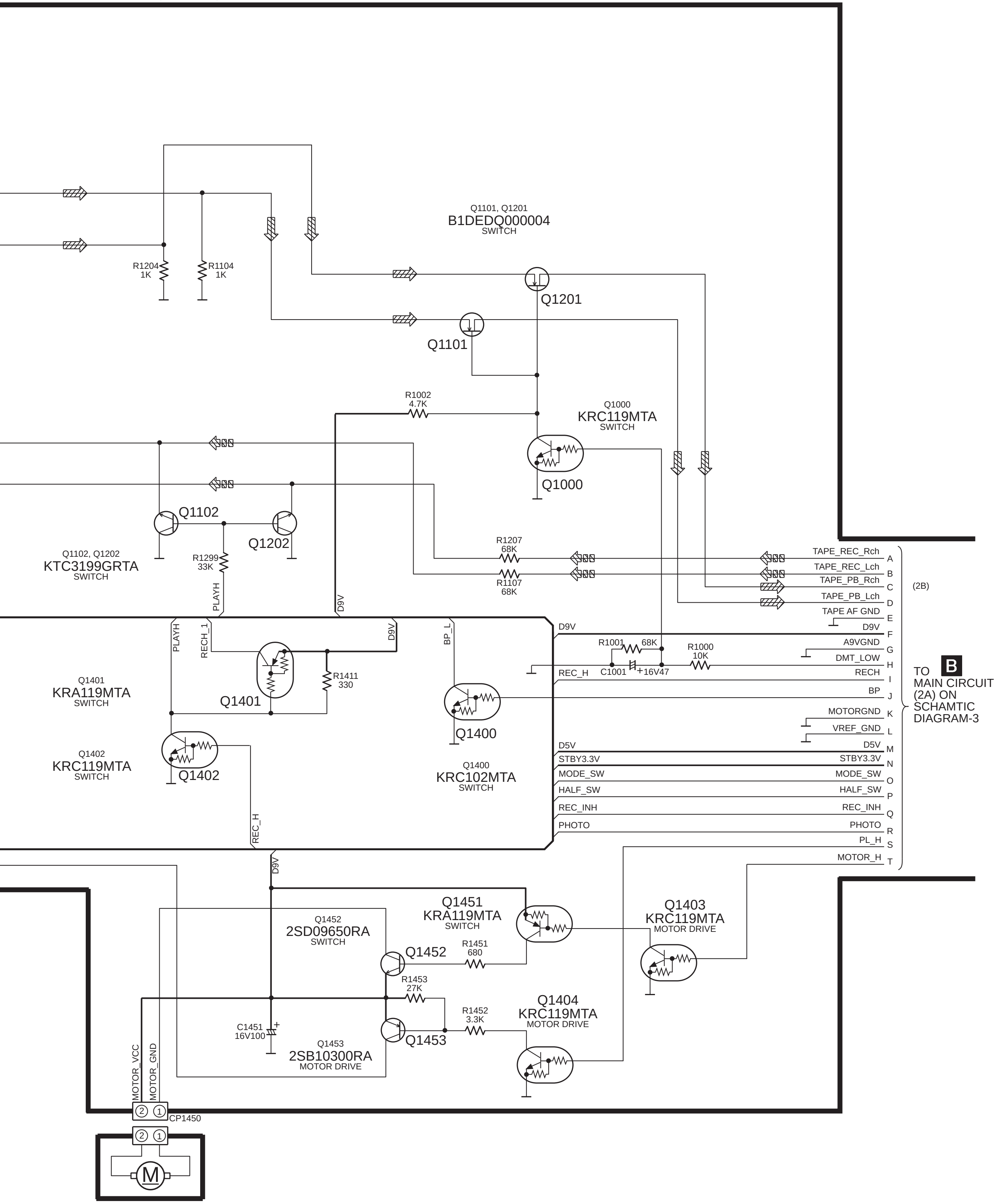
## SCHEMATIC DIAGRAM-13

## B MAIN (DECK) CIRCUIT

—— : +B SIGNAL LINE

▨ : PLAYBACK SIGNAL LINE

▨ : +B SIGNAL LINE

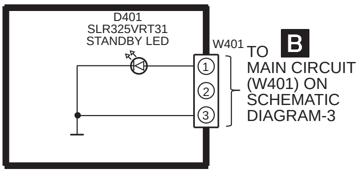

Q1101, Q1201
B1DEDQ000004
SWITCH
R1204
1K
R1104
1K
Q1201
Q1101
R1002
4.7K
Q1000
KRC119MTA
SWITCH
Q1000
Q1102
Q1202
Q1102, Q1202
KTC3199GRTA
SWITCH
R1299
33K
PLAYH
D9V
R1207
68K
R1107
68K
TAPE_REC_Rch
TAPE_REC_Lch
TAPE_PB_Rch
TAPE_PB_Lch
TAPE AF GND
D9V
A9VGND
DMT_LOW
RECH
BP
MOTORGND
VREF_GND
D5V
STBY3.3V
MODE_SW
HALF_SW
REC_INH
PHOTO
PL_H
MOTOR_H
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
(2B)
TO
B
MAIN CIRCUIT
(2A) ON
SCHAMTIC
DIAGRAM-3
PLAYH
RECH_1
D9V
BP_L
D9V
R1001
68K
R1000
10K
C1001
16V47
REC_H
Q1401
KRA119MTA
SWITCH
R1411
330
Q1401
Q1400
Q1402
KRC119MTA
SWITCH
Q1402
Q1400
KRC102MTA
SWITCH
D5V
STBY3.3V
MODE_SW
HALF_SW
REC_INH
PHOTO
REC_H
D9V
Q1451
KRA119MTA
SWITCH
Q1403
KRC119MTA
MOTOR DRIVE
Q1452
2SD09650RA
SWITCH
Q1452
R1451
680
R1453
27K
R1452
3.3K
Q1404
KRC119MTA
MOTOR DRIVE
C1451
16V100
Q1453
Q1453
2SB10300RA
MOTOR DRIVE
MOTOR_VCC
MOTOR_GND
② ①
CP1450
② ①
M

# SCHEMATIC DIAGRAM-14

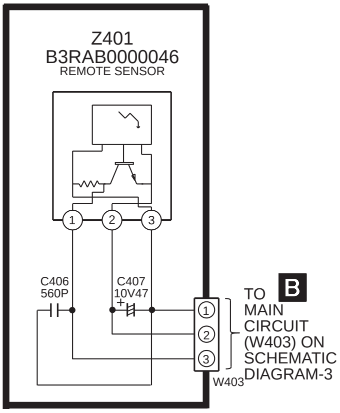
―― : +B SIGNAL LINE

⇨ : MAIN SIGNAL LINE

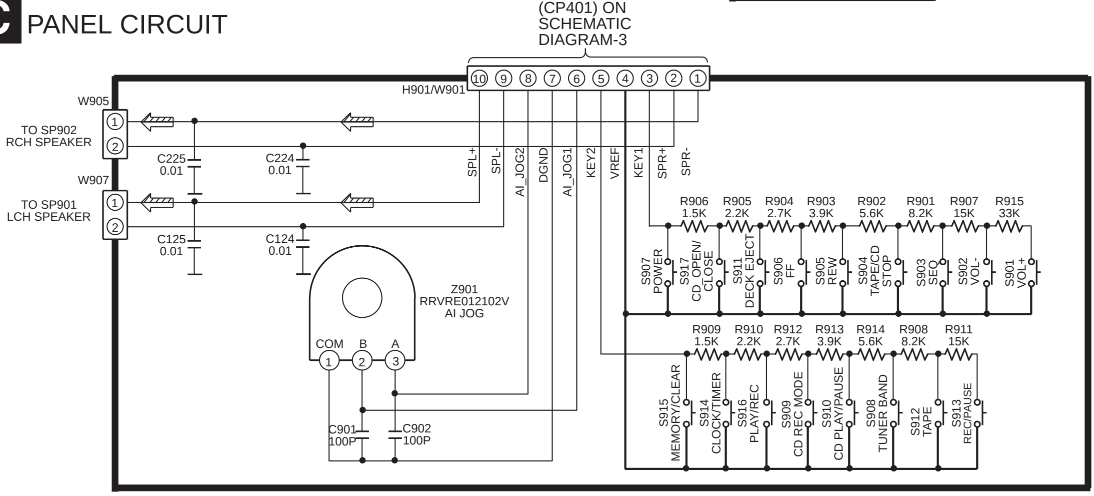
## E STANDBY LED CIRCUIT

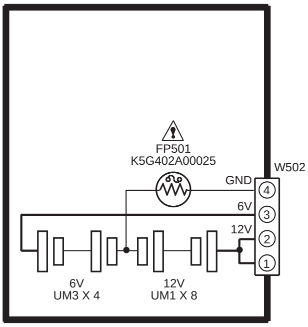

D401
SLR325VRT31
STANDBY LED
W401
1
2
3
TO B
MAIN CIRCUIT
(W401) ON
SCHEMATIC
DIAGRAM-3

## I SENSOR CIRCUIT

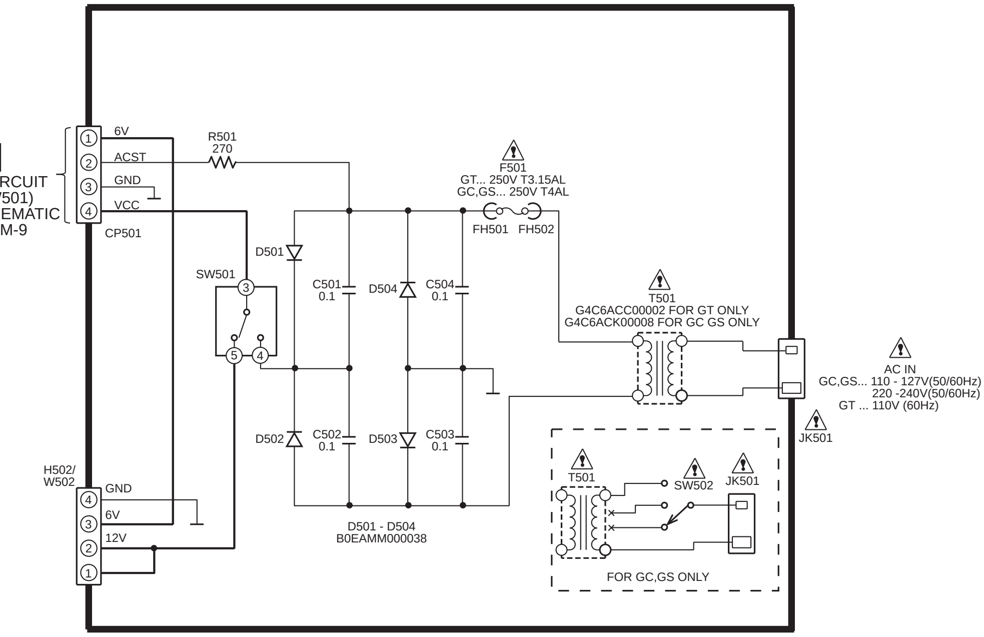

Z401
B3RAB0000046
REMOTE SENSOR
1
2
3
C406
560P
C407
10V47
+
W403
1
2
3
TO B
MAIN
CIRCUIT
(W403) ON
SCHEMATIC
DIAGRAM-3

## C PANEL CIRCUIT


TO B
MAIN
CIRCUIT
(CP401) ON
SCHEMATIC
DIAGRAM-3
H901/W901
10
9
8
7
6
5
4
3
2
1
W905
TO SP902
RCH SPEAKER
W907
TO SP901
LCH SPEAKER
C225
0.01
C224
0.01
C125
0.01
C124
0.01
SPL+
SPL-
AI_JOG2
DGND
AI_JOG1
KEY2
VREF
KEY1
SPR+
SPR-
Z901
RRVRE012102V
AI JOG
COM
B
A
C901
100P
C902
100P
R906
1.5K
R905
2.2K
R904
2.7K
R903
3.9K
R902
5.6K
R901
8.2K
R907
15K
R915
33K
S907
POWER
S917
CD OPEN/
CLOSE
S911
DECK EJECT
S906
FF
S905
REW
S904
TAPE/CD
STOP
S903
SEQ
S902
VOL-
S901
VOL+
R909
1.5K
R910
2.2K
R912
2.7K
R913
3.9K
R914
5.6K
R908
8.2K
R911
15K
S915
MEMORY/CLEAR
S914
CLOCK/TIMER
S916
PLAY/REC
S909
CD REC MODE
S910
CD PLAY/PAUSE
S908
TUNER BAND
S912
TAPE
S913
REC/PAUSE


FP501
K5G402A00025
W502
GND
6V
12V
4
3
2
1
6V
UM3 X 4
12V
UM1 X 8

## F BATTERY CIRCUIT


TO B
MAIN CIRCUIT
(H501/W501)
ON SCHEMATIC
DIAGRAM-9
CP501
1
2
3
4
6V
ACST
GND
VCC
R501
270
F501
GT... 250V T3.15AL
GC,GS... 250V T4AL
FH501
FH502
D501
SW501
3
5
4
C501
0.1
D504
C504
0.1
D502
C502
0.1
D503
C503
0.1
D501 - D504
B0EAMM000038
T501
G4C6ACC00002 FOR GT ONLY
G4C6ACK00008 FOR GC GS ONLY
AC IN
GC,GS... 110 - 127V(50/60Hz)
220 -240V(50/60Hz)
GT ... 110V (60Hz)
JK501
H502/
W502
GND
6V
12V
4
3
2
1
T501
SW502
JK501
FOR GC,GS ONLY

## H POWER CIRCUIT

(GC/GS) (GT)

# MAIN P.C.B.

| Ref No. | IC1 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 0.7 | 0 | 0.6 | 0.9 | 4.9 | 4.9 | 4.9 | 0 | 3.5 | 4.9 | 1.6 | 1.5 | 4.3 | 3.5 | 3.5 | 1.4 | 1.4 | 3.6 | 3.9 | 4.9 |
| STANDBY | 0 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC1 | | | |
|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 |
| CD PLAY | 4.9 | 4.9 | 4.9 | 4.9 |
| STANDBY | 0 | 0 | 0 | 0 |

| Ref No. | IC2 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 2.5 | 0 | 0 | 0 | 0 | 3.7 | 3.5 | 3.5 | 1.8 | 1.8 | 5.0 | 0 | 3.5 | 0 | 2.5 | 0 | 5.0 | 0 | 0 | 9.1 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -0.1 | -0.1 | 0 |

| Ref No. | IC2 | |
|---|---|---|
| MODE | 21 | 22 |
| CD PLAY | 0 | 2.5 |
| STANDBY | 0 | 0 |

| Ref No. | IC201 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 4.4 | 4.5 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.4 | 0 | 0 | 0 | 8.7 | 3.4 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC201 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| CD PLAY | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC301 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| CD PLAY | 12.1 | 0 | 0 | 0 | 2.1 | 0 | 14.5 | 14.6 | 5.7 | 0 | 5.7 | 5.7 | 0 | 5.7 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 16.4 | 16.4 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC302 | | |
|---|---|---|---|
| MODE | 1 | 2 | 3 |
| CD PLAY | 5.0 | 0 | 11.1 |
| STANDBY | 5.0 | 0 | 11.2 |

| Ref No. | IC303 | | |
|---|---|---|---|
| MODE | 1 | 2 | 3 |
| CD PLAY | 3.9 | 0 | 5.0 |
| STANDBY | 3.9 | 0 | 5.0 |

| Ref No. | IC401 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| CD PLAY | 1.3 | 0 | 1.2 | 5.0 | 1.3 | 0 | 0 | 5.0 | 1.6 | 0 | 0 | 0 | 0 | 5.0 |
| STANDBY | 0.1 | 0 | 0.1 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC801 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 1.7 | 1.7 | 1.7 | 1.7 | 1.2 | 2.3 | 3.2 | 3.2 | 0 | 0 | 0 | 0 | 3.2 | 3.2 | 3.2 | 0 | 1.6 | 1.6 | 3.2 | 1.1 |
| STANDBY | 1.7 | 1.7 | 1.7 | 1.7 | 1.2 | 2.3 | 3.1 | 3.1 | 0 | 0 | 0 | 0 | 0 | 3.2 | 3.2 | 0 | 1.5 | 1.6 | 3.2 | 1.0 |

| Ref No. | IC801 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| CD PLAY | 1.5 | 0 | 3.3 | 3.2 | 3.4 | 3.4 | 3.4 | 0.6 | 2.4 | 3.4 | 3.4 | 3.4 | 0 | 0 | 0 | 3.1 | 3.1 | 2.7 | 3.3 | 0 |
| STANDBY | 1.6 | 0 | 3.3 | 3.2 | 3.4 | 3.4 | 3.3 | 0.6 | 0 | 3.3 | 0 | 3.3 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 |

| Ref No. | IC801 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| CD PLAY | 3.0 | 1.0 | 0 | 1.0 | 0 | 0 | 2.9 | 0 | 3.2 | 0 | 0 | 3.2 | 0 | 3.2 | 3.2 | 0 | 3.2 | 0 | 0 | 0 |
| STANDBY | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0.9 | 3.2 | 0 | 0 | 3.2 | 0 | 0 | 3.2 | 0 | 3.2 | 0 | 0 | 0 |

| Ref No. | IC801 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| CD PLAY | 3.2 | 3.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.6 | 1.5 | 1.7 |
| STANDBY | 0 | 3.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |

| Ref No. | IC801 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| CD PLAY | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| STANDBY | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |

| Ref No. | IC971 | | | |
|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 |
| CD PLAY | 0 | 0 | 7.3 | 0 |
| STANDBY | 0 | 0 | 0.2 | 0 |

| Ref No. | IC1301 | | | | |
|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 |
| CD PLAY | 6.8 | 0 | 0 | 0 | 0 |
| STANDBY | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC1302 | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| CD PLAY | 0 | 0.6 | 3.6 | 0 | 3.3 | 3.3 | 0 | 0 | 6.2 | 3.8 | 3.7 | 3.3 | 0 | 3.6 | 0.6 | 0 |
| STANDBY | 0 | 0 | 0 | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 |

| Ref No. | Q1 | | | | Q102 | | | | Q103 | | | | Q202 | | | | Q203 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 0 | 3.5 | 0 | | 3.0 | 4.5 | 2.5 | | 7.1 | 7.5 | 6.6 | | 3.1 | 4.5 | 2.5 | | 7.2 | 7.5 | 6.5 | |
| STANDBY | 0 | 0.1 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Ref No. | Q301 | | | | Q302 | | | | Q303 | | | | Q304 | | | | Q305 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 11.8 | 14.6 | 11.1 | | 4.2 | 0 | 0 | | 3.2 | 3.9 | 3.9 | | 0.6 | 0 | 0 | | 14.0 | 14.7 | 14.7 | |
| STANDBY | 11.8 | 16.3 | 11.2 | | 5.0 | 0 | 0 | | 3.2 | 3.9 | 3.9 | | 0.6 | 0 | 0 | | 16.4 | 0 | 16.3 | |
| Ref No. | Q306 | | | | Q307 | | | | Q308 | | | | Q309 | | | | Q310 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 2.6 | 0.4 | 0 | | 14.5 | 13.8 | 14.6 | | 14.5 | 9.1 | 13.8 | | 8.9 | 13.8 | 8.3 | | 6.9 | 5.0 | 7.5 | |
| STANDBY | 0 | 16.3 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0.1 | 0 | 0 | | 0 | 0 | 0 | |
| Ref No. | Q311 | | | | Q312 | | | | Q313 | | | | Q314 | | | | Q315 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 4.8 | 6.9 | 4.3 | | 4.3 | 3.4 | 5.0 | | 3.3 | 4.3 | 2.7 | | 4.3 | 4.9 | 4.9 | | 2.8 | 0 | 0 | |
| STANDBY | 0 | 0 | 0 | | 1.9 | 0.4 | 0 | | 0 | 2.0 | 0 | | 5.0 | 0 | 5.0 | | 0 | 5.0 | 0 | |
| Ref No. | Q316 | | | | Q317 | | | | Q803 | | | | Q1000 | | | | Q1101 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 1.4 | 2.4 | 0.7 | | 0.7 | 0 | 0 | | 0 | 3.2 | 0 | | 0 | 9.0 | 0 | | 0 | 9.0 | 0 | |
| STANDBY | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 3.2 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | |
| Ref No. | Q1102 | | | | Q1103 | | | | Q1104 | | | | Q1201 | | | | Q1202 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 0.6 | 0 | 0 | | 0 | 0 | 0 | | 0 | 3.7 | 0 | | 0 | 9.0 | 0 | | 0.6 | 0 | 0 | |
| STANDBY | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0.1 | |
| Ref No. | Q1203 | | | | Q1204 | | | | Q1301 | | | | Q1303 | | | | Q1400 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 0 | 0 | 0 | | 0 | 3.7 | 0 | | 0.7 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0.7 | 0 | |
| STANDBY | 0 | 0 | 0 | | 0 | 0 | 0 | | 0.7 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0.7 | 0 | |
| Ref No. | Q1401 | | | | Q1402 | | | | Q1403 | | | | Q1404 | | | | Q1451 | | | |
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| CD PLAY | 9.0 | 0 | 9.0 | | 0 | 9.0 | 0 | | 0 | 9.0 | 0 | | 0 | 9.0 | 0 | | 9.0 | -1.6 | 9.0 | |
| STANDBY | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | -0.1 | 0 | |
| Ref No. | Q1452 | | | | Q1453 | | | | | | | | | | | | | | | |
| MODE | E | C | B | | E | C | B | | | | | | | | | | | | | |
| CD PLAY | -0.6 | 8.4 | 0 | | 9.0 | 0 | 9.0 | | | | | | | | | | | | | |
| STANDBY | -0.1 | 0 | 0 | | 0 | 0 | 0 | | | | | | | | | | | | | |

# CD SERVO P.C.B

| Ref No. | IC702 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 0 | 0 | 1.1 | 3.4 | 1.6 | 0 | 1.7 | 0 | 0.5 | 0 | 1.6 | 0 | 1.8 | 0 | 3.4 | 1.5 | 0 | 1.7 | 1.9 | 1.7 |
| STANDBY | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC702 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| CD PLAY | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.9 | 1.7 | 0.2 | 2.5 | 2.0 | 2.0 | 1.8 | 1.8 | 1.8 | 1.8 | 1.6 | 3.4 | 0 | 0.8 | 2.2 |
| STANDBY | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0 | 0.3 | 0.2 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.4 | 0 | 0 | 0 |

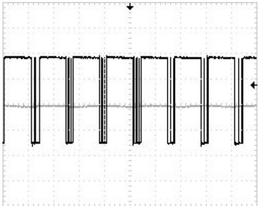
| Ref No. | IC702 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| CD PLAY | 1.6 | 1.4 | 0 | 1.7 | 1.7 | 0.8 | 1.4 | 1.4 | 3.4 | 1.5 | 0 | 1.1 | 3.1 | 1.5 | 0 | 3.4 | 1.5 | 3.3 | 0 | 3.3 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0.4 | 0 | 0.4 | 0 | 0.4 |

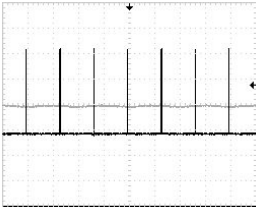
| Ref No. | IC702 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| CD PLAY | 0 | 0 | 3.1 | 3.1 | 3.2 | 2.7 | 0 | 3.2 | 0 | - | - | 3.3 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 3.3 |
| STANDBY | 0.1 | 0.1 | 0 | 0 | 0 | 0.2 | 0.8 | 0 | 0 | 0.2 | 0.2 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |

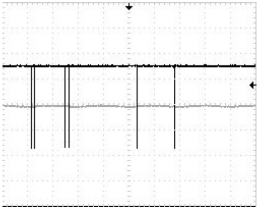
| Ref No. | IC703 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| CD PLAY | 1.7 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 7.5 | 4.2 | 3.5 | 3.5 | 3.5 | 3.0 | 4.0 | 3.5 | 3.4 | 7.5 | 0 |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

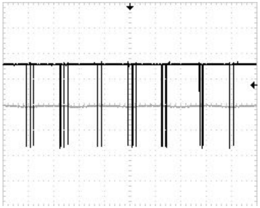
| Ref No. | IC703 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | | | | | | | | | | | |
| CD PLAY | 7.5 | 0 | 0 | 0 | 7.5 | 1.7 | 1.7 | 1.7 | | | | | | | | | | | | |
| STANDBY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | |

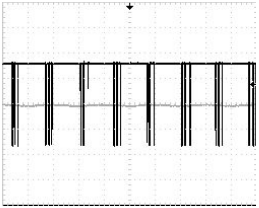
| Ref No. | Q701 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | | | | | | | | | | | | | | | | | |
| CD PLAY | 3.2 | 2.1 | 2.5 | | | | | | | | | | | | | | | | | |
| STANDBY | 0.4 | 0.3 | 0.1 | | | | | | | | | | | | | | | | | |

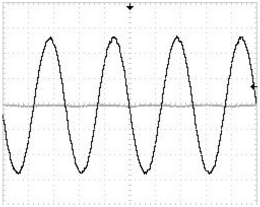

CP402 PIN 4
CD PLAY
3.56Vp-p (10msec.div)

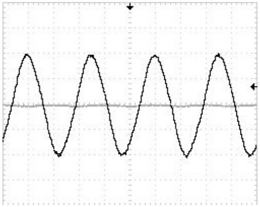

CP402 PIN 5
CD PLAY
3.44Vp-p (10msec.div)

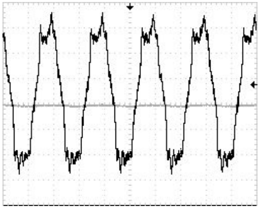

CP402 PIN 6
CD PLAY
3.28Vp-p (10msec.div)

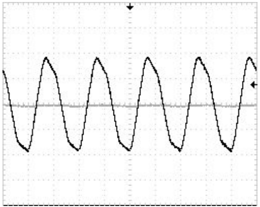

CP402 PIN 7
CD PLAY
3.40Vp-p (10msec.div)

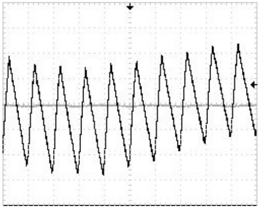

CP402 PIN 8
CD PLAY
3.36Vp-p (10msec.div)

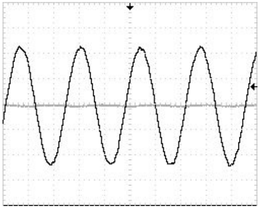

IC801 PIN 17
CD PLAY
2.72Vp-p (50nsec.div)

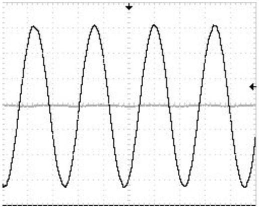

IC801 PIN 18
CD PLAY
4.12Vp-p (50nsec.div)

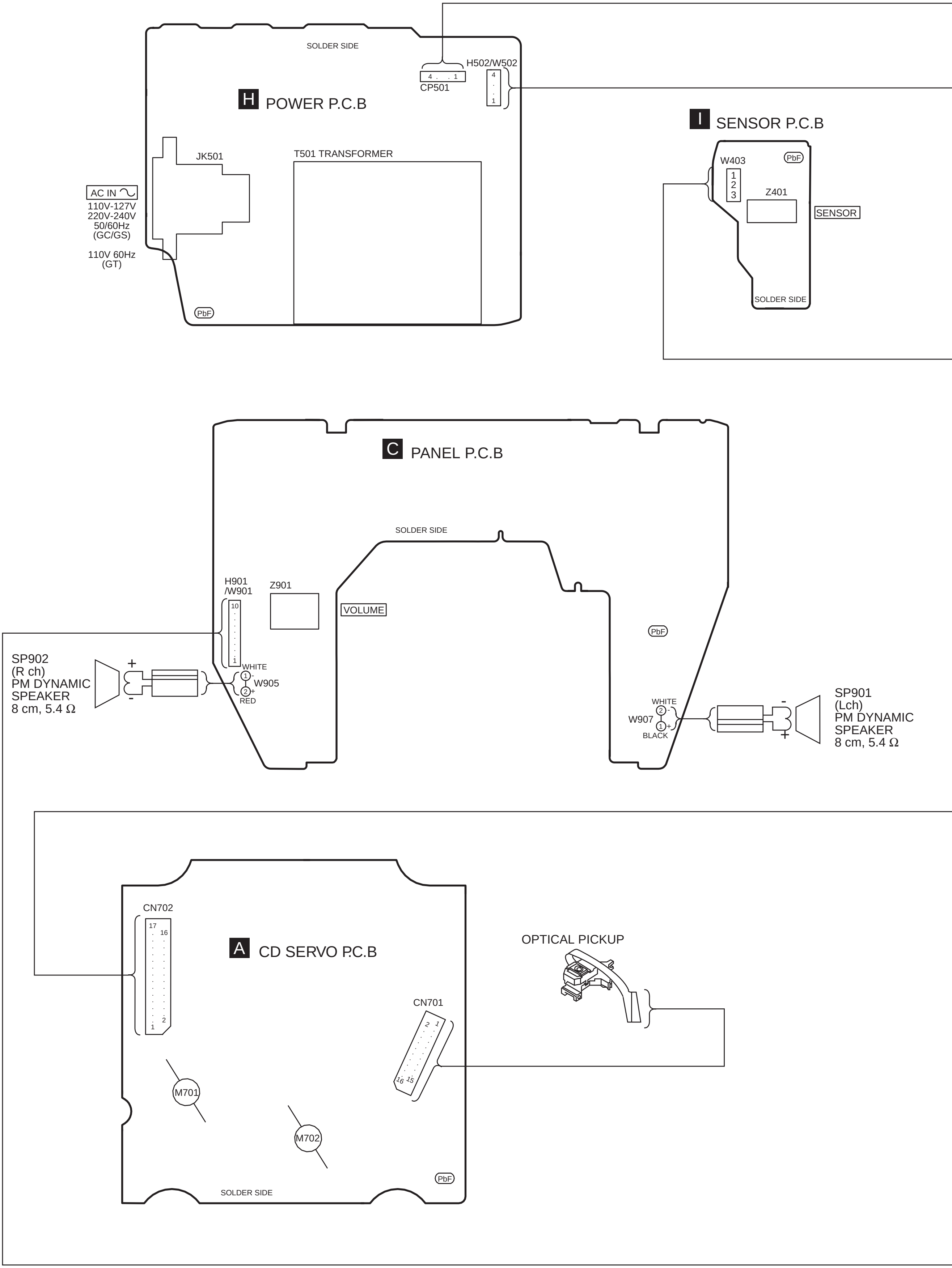

W501 PIN 1
CD PLAY
636mVp-p (10msec.div)

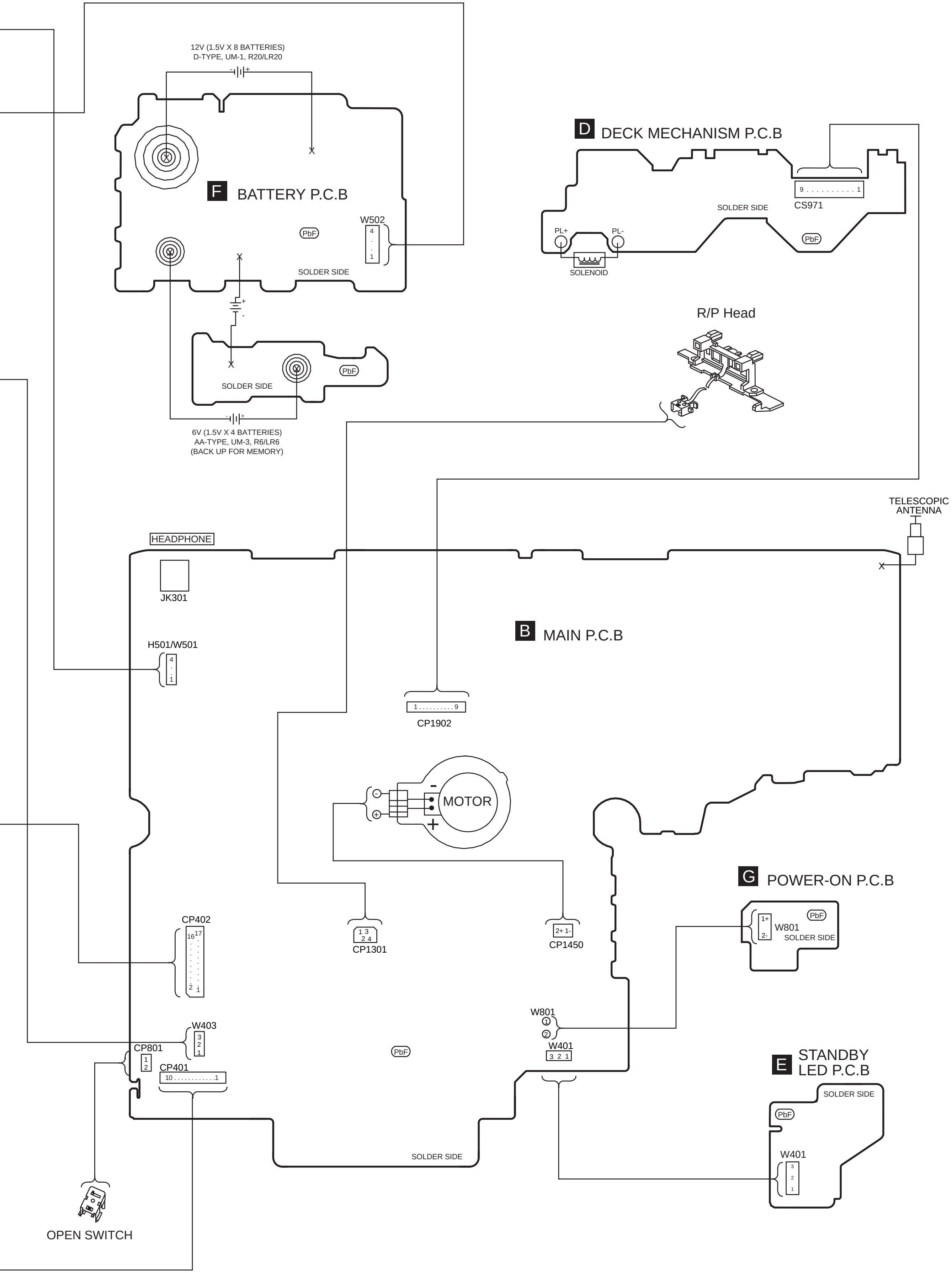

W501 PIN 2
CD PLAY
1.86Vp-p (10msec.div)

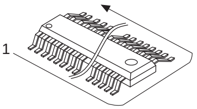
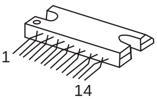
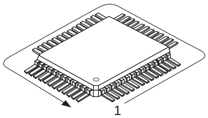
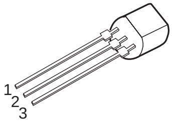
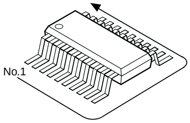
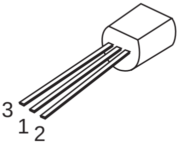
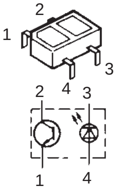
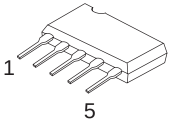
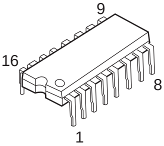
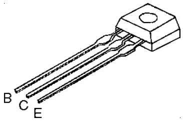
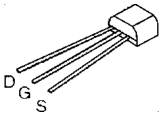
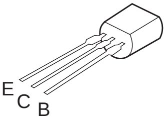
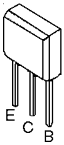
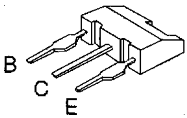
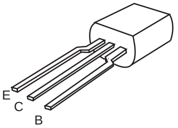
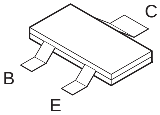
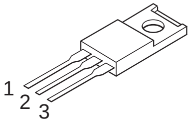
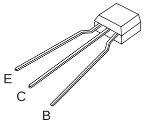
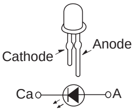
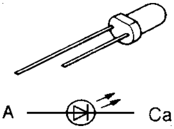
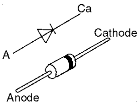
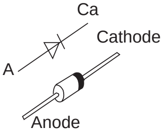
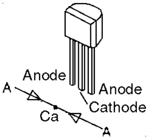
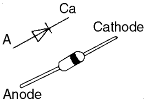
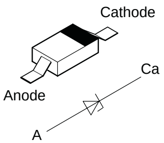
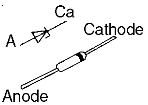

W501 PIN 4
CD PLAY
1.03Vp-p (10msec.div)


X701 LEFTSIDE
CD PLAY
2.36Vp-p (25nsec.div)


X701 RIGHTSIDE
CD PLAY
3.20Vp-p (25nsec.div)


SOLDER SIDE
H POWER P.C.B
CP501
4 . . 1
H502/W502
4
.
.
1
JK501
T501 TRANSFORMER
AC IN
110V-127V
220V-240V
50/60Hz
(GC/GS)
110V 60Hz
(GT)
PbF
I SENSOR P.C.B
W403
1
2
3
Z401
PbF
SENSOR
SOLDER SIDE
C PANEL P.C.B
SOLDER SIDE
H901
/W901
10
1
Z901
VOLUME
PbF
SP902
(R ch)
PM DYNAMIC
SPEAKER
8 cm, 5.4 Ω
+
-
WHITE
① -
W905
② +
RED
WHITE
② -
W907
① +
BLACK
-
+
SP901
(Lch)
PM DYNAMIC
SPEAKER
8 cm, 5.4 Ω
A CD SERVO P.C.B
CN702
17
16
1
2
CN701
2 1
16 15
M701
M702
PbF
SOLDER SIDE
OPTICAL PICKUP


12V (1.5V X 8 BATTERIES)
D-TYPE, UM-1, R20/LR20
F BATTERY P.C.B
W502
4
1
PbF
SOLDER SIDE
SOLDER SIDE
PbF
6V (1.5V X 4 BATTERIES)
AA-TYPE, UM-3, R6/LR6
(BACK UP FOR MEMORY)
D DECK MECHANISM P.C.B
9 . . . . . . . . . . 1
CS971
SOLDER SIDE
PL+
PL-
SOLENOID
PbF
R/P Head
TELESCOPIC
ANTENNA
HEADPHONE
JK301
B MAIN P.C.B
H501/W501
4
1
1 . . . . . . . . . 9
CP1902
MOTOR
-
+
G POWER-ON P.C.B
PbF
1+
2-
W801
SOLDER SIDE
CP402
16 17
2 1
CP1301
1 3
2 4
CP1450
2+ 1-
W801
①
②
W401
3 2 1
W403
3
2
1
CP801
1
2
CP401
10 . . . . . . . . . . . .1
PbF
SOLDER SIDE
E STANDBY
LED P.C.B
SOLDER SIDE
PbF
W401
3
2
1
OPEN SWITCH

| | | | | |
|---|---|---|---|---|
| C1BA00000395 (24P)<br>C1CA00000198 (22P)<br>BA5948FPE2 (28P)<br> | LA4663 (14P)<br> | MN6627953HB (80P)<br>MN101C74GAA2 (100P)<br> | C0CAABC00007<br> | C1BB00000732 (32P)<br>C0JBAZ001229 (14P)<br> |
| C0CAADC00031 (3P)<br> | CNB13030R2AU<br> | C1AA00000612 (5P)<br> | AN7317 (16P)<br> | KTC3199GRTA<br> |
| B1DEDQ000004<br> | 2SD09650RA<br> | 2SA1515STPQ<br>2SB10300RA<br> | B1ACND000003<br> | KTA1270YTA<br> |
| B1ADCF000001<br> | B1BCCG000021<br> | KRA119MTA<br>KRC102MTA<br>KRC104MTA<br>KRC107MTA<br>KRC119MTA<br>B1AAGF000008<br>2SC1740SLNRT<br>B1ACCF000063 |  | LNW9A8BYBZ<br> Cathode<br>Anode<br>Ca<br>A |
| SLR325VRT31<br> | B0EAMM000038<br> Ca<br>Cathode<br>A<br>Anode | B0EAKM000117<br> Ca<br>Cathode<br>A<br>Anode | KV1520NT1-2<br>B0CBBB000004<br> Anode<br>A<br>Anode<br>Cathode<br>Ca<br>A | B0AACK000004<br>MA2C16500E<br> Ca<br>Cathode<br>A<br>Anode |
| MAZ80560ML<br> Cathode<br>Ca<br>Anode<br>A | B0BA01100004<br>B0BA6R100003<br>B0BA7R500006<br>B0BA8R700009<br> Ca<br>A<br>Cathode<br>Anode | | | |

This unit can play MP3, a method of compressing audio without affecting audio quality.

## ■ When creating MP3 files to play on this unit

Disc format: ISO9660 level 1 and level 2 (except for extended formats)

Title names and album names are not displayable on this unit.

## ■ Limitation on MP3

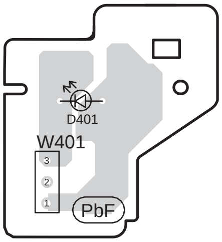
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- This unit cannot play files recorded using packet write.
- If a CD-ROM format CD contains MP3 and files other than MP3, only the MP3 files will be playable.
- Depending on how you create MP3 files, they may not play in the order you numbered them or may not play at all.

**MPEG Layer-3 audio decoding technology licenced from Fraunhofer IIS and Thomson multimedia.**

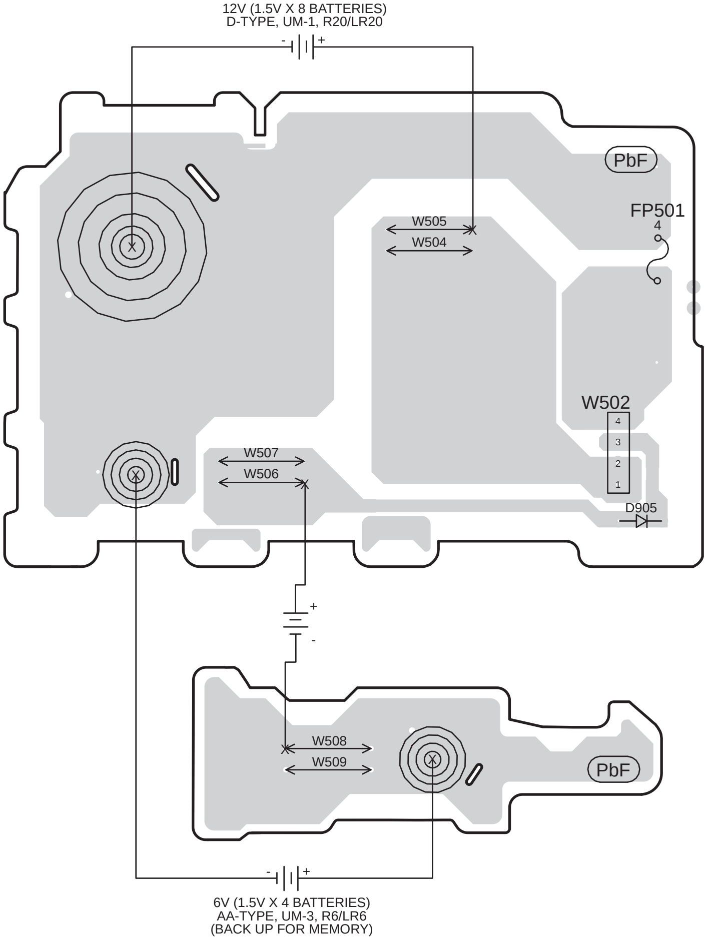
A B C D E F G

1 2 3 4 5 6 7 8 9

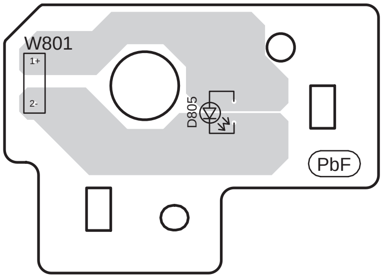
## E STANDBY LED P.C.B
(REPV0043C...GC/GS)
(REPV0043D...GT)


D401
W401
3
2
1
PbF

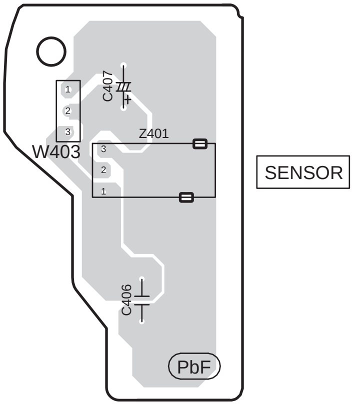
## F BATTERY P.C.B
(REPV0043C...GC/GS)
(REPV0043D...GT)


12V (1.5V X 8 BATTERIES)
D-TYPE, UM-1, R20/LR20
-
+
PbF
W505
W504
FP501
4
W502
4
3
2
1
W507
W506
D905
+
-
W508
W509
PbF
-
+
6V (1.5V X 4 BATTERIES)
AA-TYPE, UM-3, R6/LR6
(BACK UP FOR MEMORY)

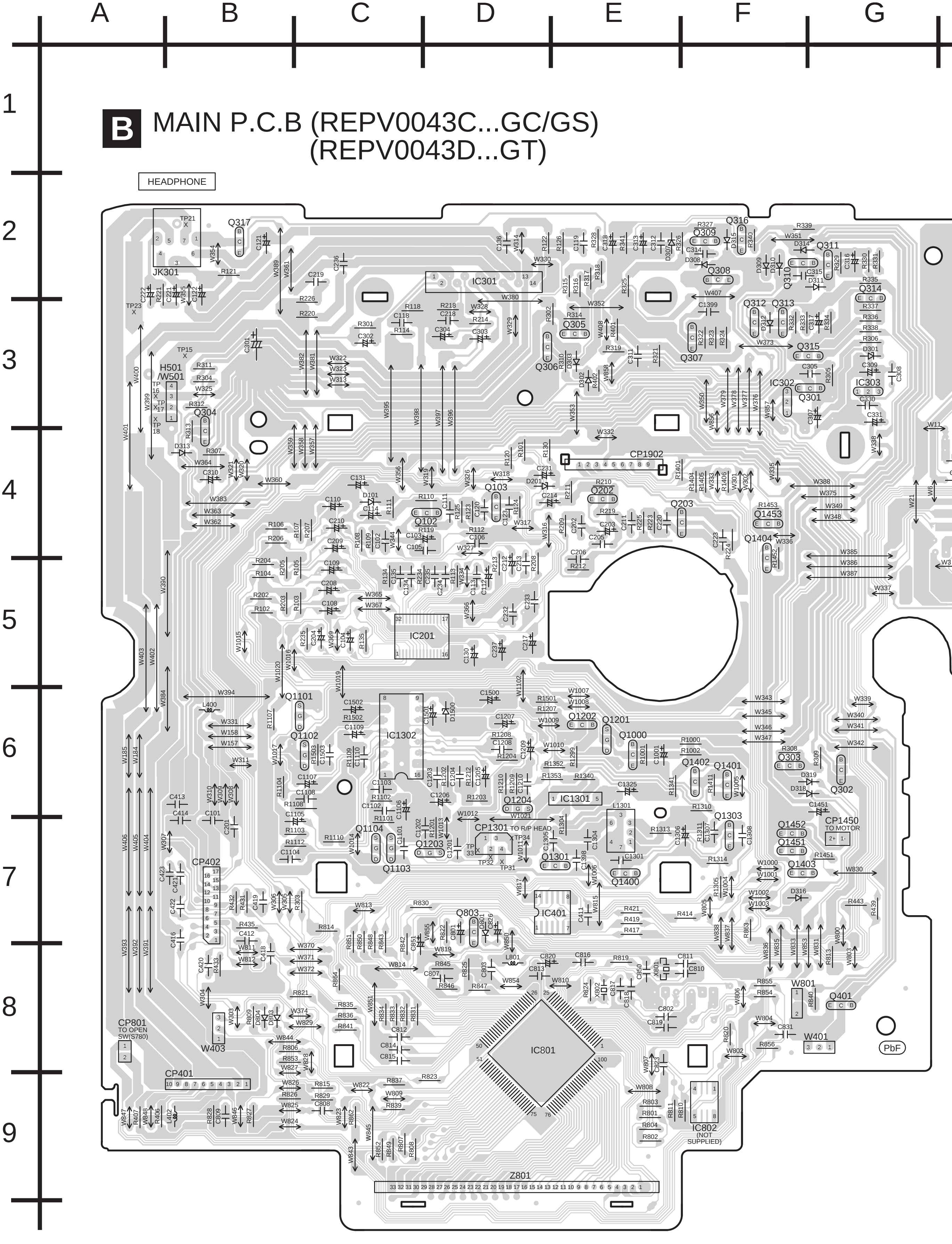
## G POWER ON P.C.B
(REPV0043C...GC/GS)
(REPV0043D...GT)

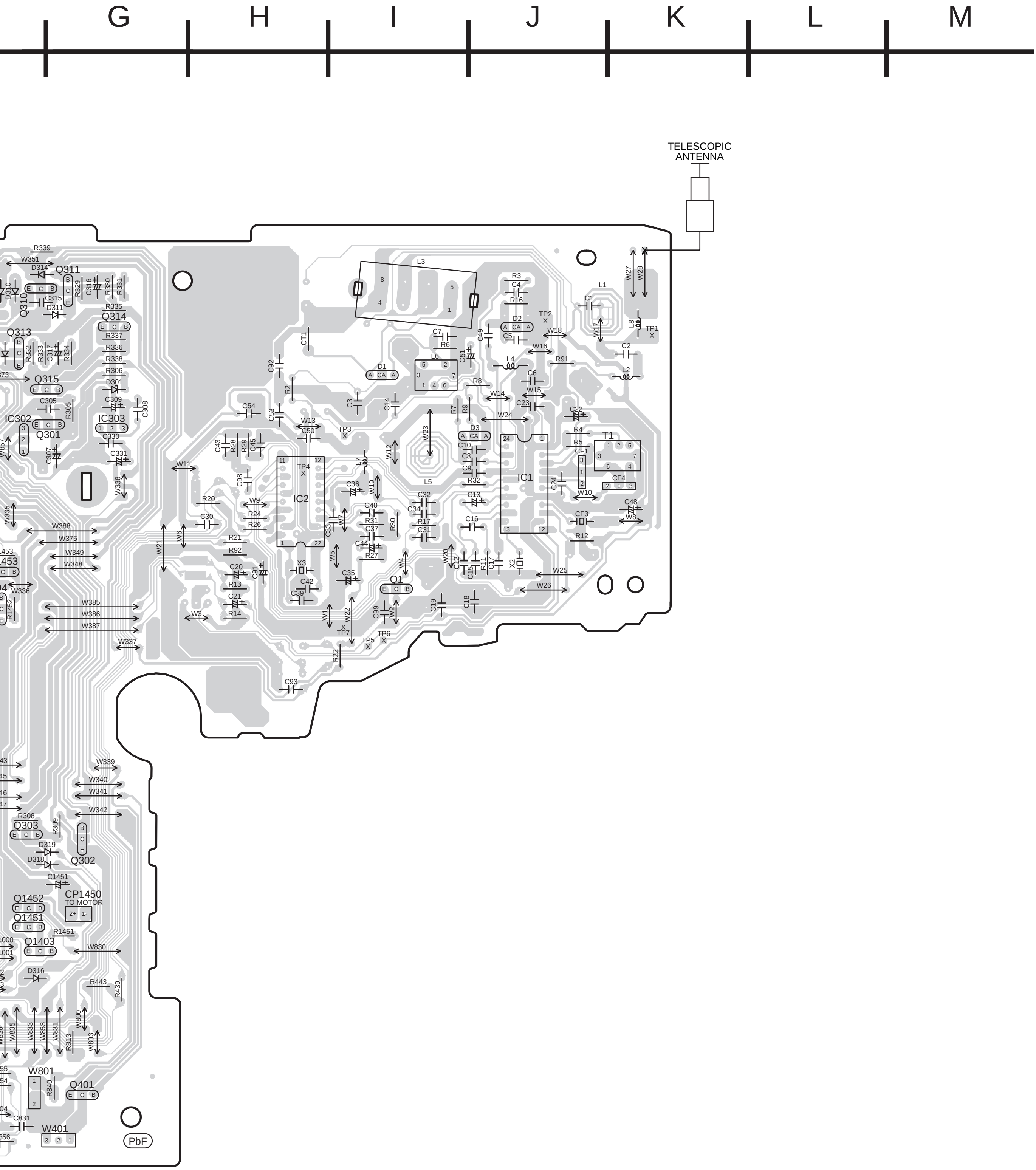

W801
1+
2-
D805
PbF

## I SENSOR P.C.B
(REPV0043C...GC/GS)
(REPV0043D...GT)

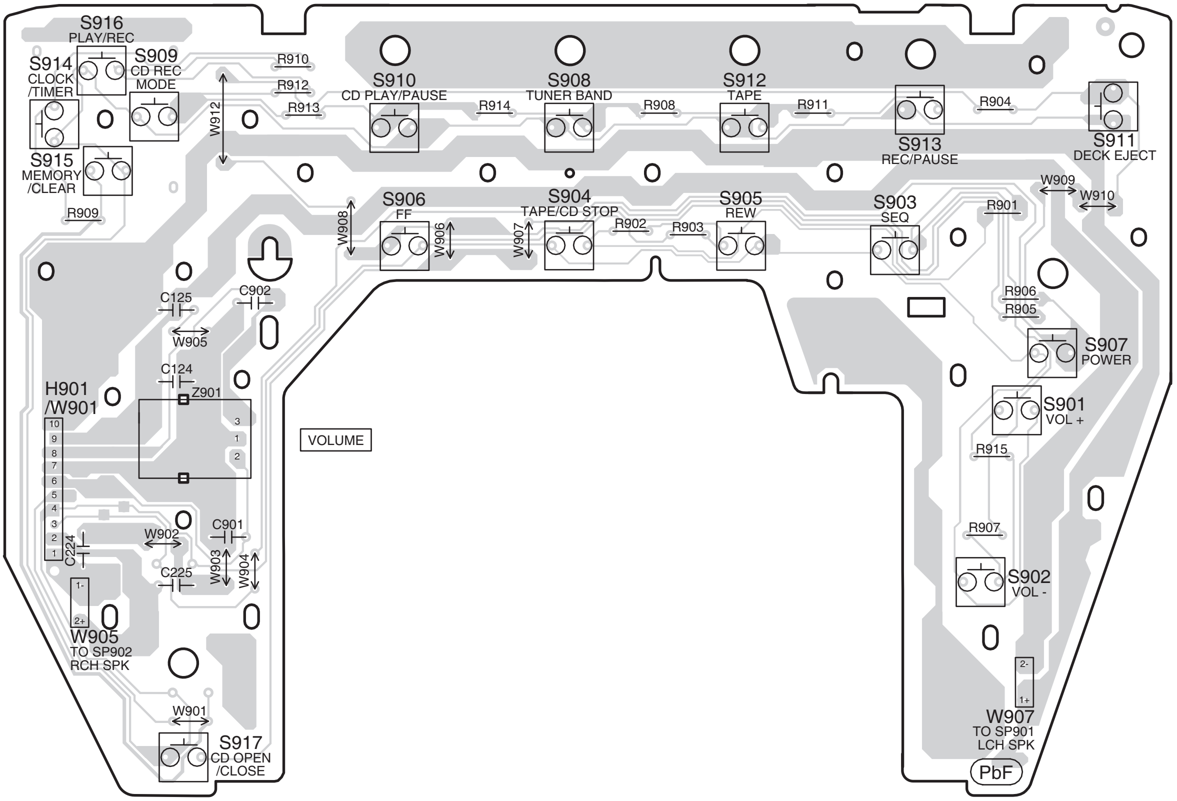

C407
1
2
3
W403
Z401
3
2
1
SENSOR
C406
PbF

# **B** MAIN P.C.B (REPV0043C...GC/GS)
# (REPV0043D...GT)

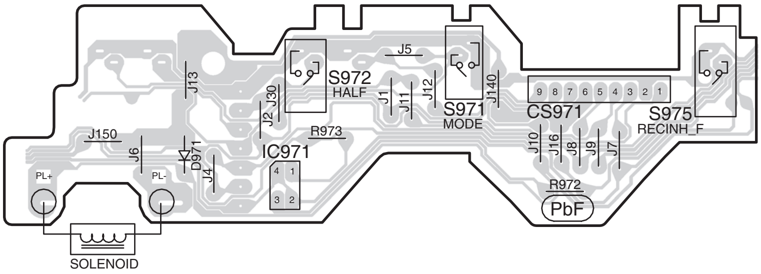

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
HEADPHONE
JK301
TP21
TP23
TP15
H501
/W501
Q317
Q304
Q309
Q316
Q311
Q308
Q310
Q314
Q312
Q313
Q305
Q306
Q307
Q315
IC302
Q301
IC301
CP1902
Q103
Q102
Q202
Q203
Q1453
Q1404
IC201
Q1101
Q1102
IC1302
Q1202
Q1201
Q1000
Q1402
Q1401
Q303
Q302
Q1204
IC1301
L1301
Q1303
Q1452
Q1451
CP1450
TO MOTOR
Q1104
Q1203
Q1103
CP1301 TO R/P HEAD
TP34
TP33
TP32
TP31
Q1301
Q1400
Q1403
CP402
IC401
Q803
Q401
W801
CP801
TO OPEN
SW(S780)
W403
IC801
W401
PbF
CP401
IC802
(NOT
SUPPLIED)
Z801


G
H
I
J
K
L
M
TELESCOPIC
ANTENNA
L3
R3
C4
R16
D2
TP2
C7
R6
C49
C5
W16
W18
W17
W27
W28
L1
C1
L8
TP1
C2
L2
R91
L4
C6
W15
W14
C23
C22
R4
R5
T1
CF1
CF4
C24
W10
C48
W8
CF3
R12
IC1
W24
D3
C10
C8
C9
R32
C13
C16
R7
R9
R8
L6
C51
D1
CT1
C92
R2
C3
C14
C53
C54
W13
C50
TP3
W23
W12
L5
L7
IC2
TP4
C43
R28
R29
C45
C98
W11
W9
R20
R24
R26
C30
W6
W21
R21
R92
C20
R13
C91
C21
R14
W3
X3
C42
C39
C36
W19
C40
R31
C37
C44
R27
R30
C33
W7
W5
C35
C32
C34
R17
C31
W4
Q1
W20
C12
C15
R11
C17
X2
W25
W26
C19
C18
C99
W2
W22
W1
TP7
TP5
TP6
R22
C93
R339
W351
D314
Q311
R329
C316
R330
R331
C315
D311
Q310
R335
Q314
R337
R336
R338
R306
D301
C309
IC303
C308
Q313
R332
R333
C317
R334
Q315
C305
R305
IC302
Q301
C330
C307
C331
W338
W335
W388
W375
W349
W348
W336
R1452
W385
W386
W387
W337
W339
W340
W341
W342
R308
Q303
R309
Q302
D319
D318
C1451
Q1452
CP1450
TO MOTOR
Q1451
R1451
Q1403
W830
D316
R443
R439
W835
W833
W853
W831
W800
R813
W803
W801
R840
Q401
C831
W401
PbF

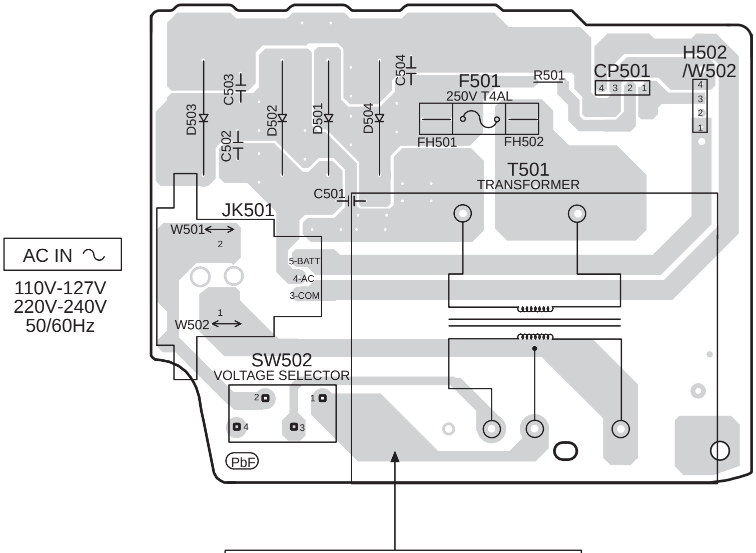
## **C** PANEL P.C.B (REPV0045A)


S916
PLAY/REC
S914
CLOCK
/TIMER
S909
CD REC
MODE
S915
MEMORY
/CLEAR
R909
R910
R912
R913
W912
S910
CD PLAY/PAUSE
R914
S908
TUNER BAND
R908
S912
TAPE
R911
S913
REC/PAUSE
R904
S911
DECK EJECT
W909
W910
S906
FF
W908
W906
S904
TAPE/CD STOP
W907
R902
R903
S905
REW
S903
SEQ
R901
R906
R905
S907
POWER
S901
VOL +
R915
R907
S902
VOL -
C125
C902
W905
C124
Z901
H901
/W901
VOLUME
C901
W902
C224
C225
W903
W904
W905
TO SP902
RCH SPK
W901
S917
CD OPEN
/CLOSE
W907
TO SP901
LCH SPK
PbF

## **D** DECK MECHANISM P.C.B (REPX0321F)

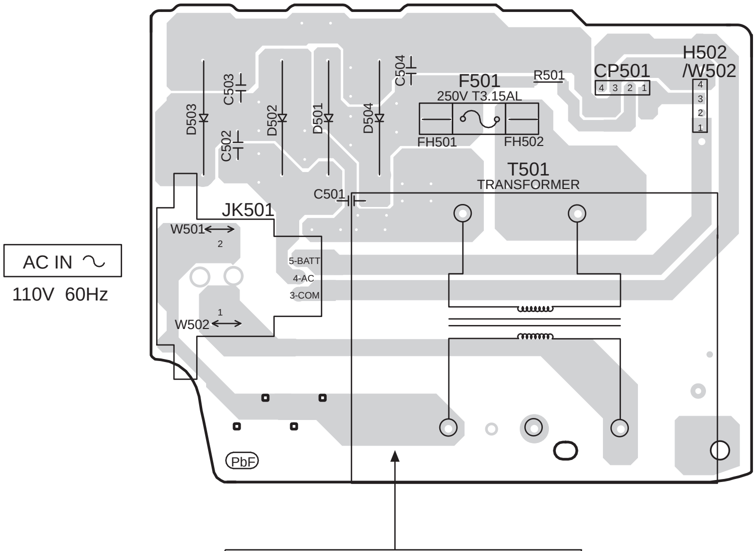

J13
S972
HALF
J30
J2
J5
J1
J11
J12
S971
MODE
J140
CS971
S975
RECINH_F
J150
J6
D971
J4
IC971
R973
J10
J16
J8
J9
J7
R972
PbF
PL+
PL-
SOLENOID

## **H** POWER P.C.B (REPV0043C...GC/GS)


AC IN ~
110V-127V
220V-240V
50/60Hz
D503
C503
C502
D502
D501
D504
C504
F501
250V T4AL
FH501
FH502
R501
CP501
4 3 2 1
H502
/W502
4
3
2
1
T501
TRANSFORMER
C501
JK501
W501
2
5-BATT
4-AC
3-COM
1
W502
SW502
VOLTAGE SELECTOR
2
1
4
3
PbF

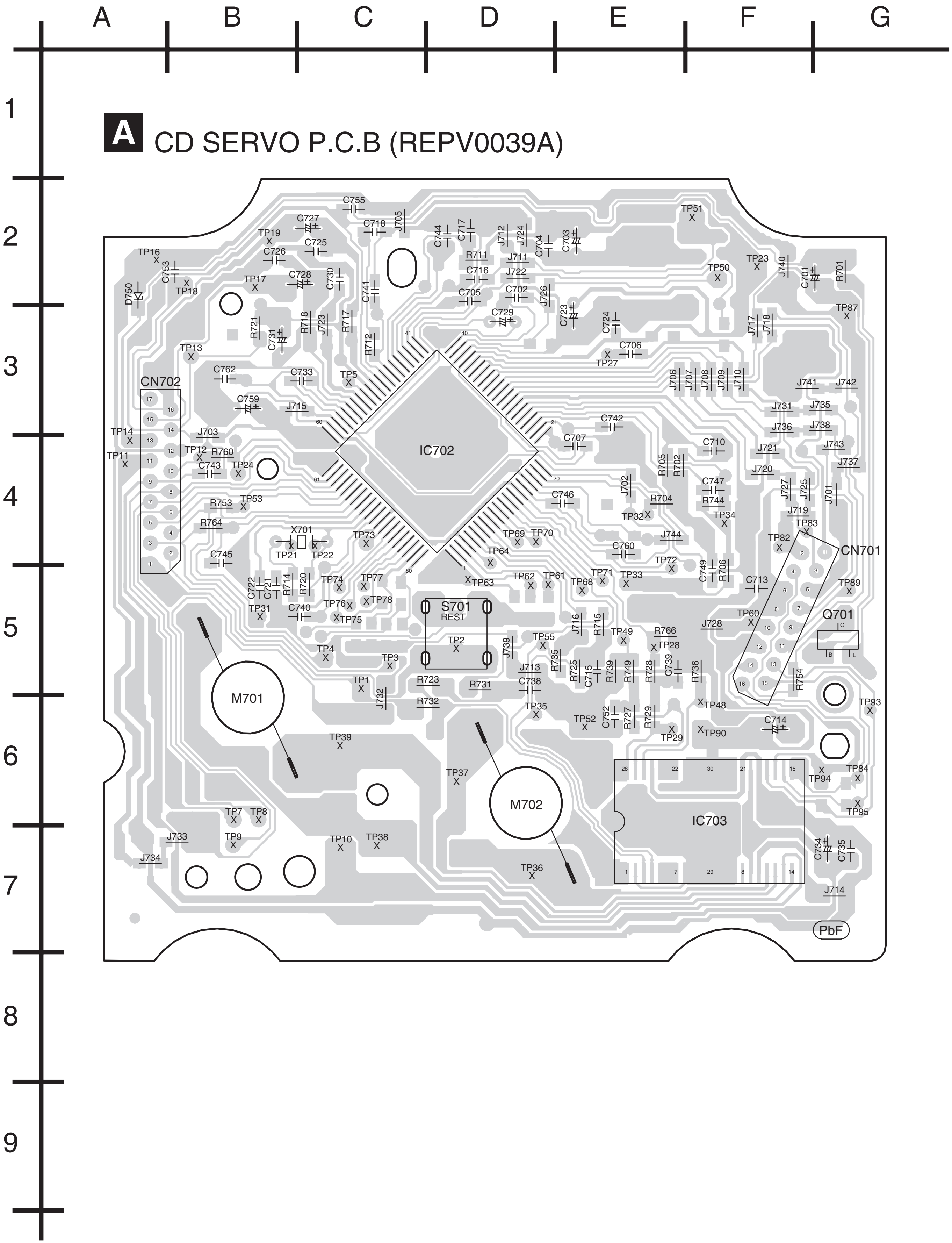
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

## **H** POWER P.C.B (REPV0043D...GT)


AC IN ~
110V 60Hz
D503
C503
C502
D502
D501
D504
C504
F501
250V T3.15AL
FH501
FH502
R501
CP501
4 3 2 1
H502
/W502
4
3
2
1
T501
TRANSFORMER
C501
JK501
W501
2
5-BATT
4-AC
3-COM
1
W502
PbF

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

## **A** CD SERVO P.C.B (REPV0039A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
IC702
IC703
CN701
CN702
Q701
M701
M702
S701
REST
X701
D750
PbF
C701
C702
C703
C704
C705
C706
C707
C710
C713
C714
C715
C716
C717
C718
C721
C722
C723
C724
C725
C726
C727
C728
C729
C730
C731
C733
C734
C735
C738
C739
C740
C741
C742
C743
C744
C745
C746
C747
C749
C752
C753
C755
C759
C760
C762
R701
R702
R704
R705
R706
R711
R712
R714
R715
R717
R718
R720
R721
R723
R725
R727
R728
R729
R731
R732
R735
R736
R739
R744
R749
R753
R754
R760
R764
R766
J701
J702
J703
J705
J706
J707
J708
J709
J710
J711
J712
J713
J714
J715
J716
J717
J718
J719
J720
J721
J722
J723
J724
J725
J726
J727
J728
J731
J732
J733
J734
J735
J736
J737
J738
J739
J740
J741
J742
J743
J744
TP1
TP2
TP3
TP4
TP5
TP7
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TP16
TP17
TP18
TP19
TP21
TP22
TP23
TP24
TP27
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TP29
TP31
TP32
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TP39
TP48
TP49
TP50
TP51
TP52
TP53
TP55
TP60
TP61
TP62
TP63
TP64
TP68
TP69
TP70
TP71
TP72
TP73
TP74
TP75
TP76
TP77
TP78
TP82
TP83
TP84
TP87
TP89
TP90
TP93
TP94
TP95